STRATEGIC ENVIRONMENTAL ASSESSMENT

Final Environmental Report

Variation No. 2

prepared under the Planning and Development (Strategic Environmental Assessment) Regulations 2004. (S.I. 456 of 2025) as amended.

1 Contents

1 Introduction and Context 1

1.1 Background 1

1.2 Purpose of the Variation and Context 1

1.3 Strategic Environmental Assessment 2

1.4 Structure of this SEA ER 3

2 Methodology 5

2.1 Introduction 5

2.2 Stages in the SEA Process 5

2.3 Screening 5

2.4 Scoping 6

2.5 Baseline Data 11

2.5.1 Preliminary environmental profile of Variation lands 11

2.5.2 Geographical Information Systems 12

2.6 Approach to assessment of significant environmental impacts 12

2.7 Mitigation 13

2.8 Monitoring 13

2.9 Data Gaps 13

3 Relationship to Plans and Programmes 14

3.1 Introduction 14

3.1.1 Regional and Local 15

3.2 Key implications and principles arising from the Plan, Policy and Programme Review 16

4 Key Environmental Resources 27

4.1 Introduction 27

4.2 Biodiversity, Flora and Fauna 27

4.2.1 Ecological Connectivity and Non-designated Habitats 29

4.2.2 Designated Sites 29

4.2.3 Green Infrastructure 30

4.3 Population and Human Health 32

4.3.1 Human health- 33

4.3.2 Noise and human health 33

4.3.3 Air quality and human health 35
4.4 Climate Change 36
4.5 Water resources including flooding 37
4.5.1 Flood Risk 39
4.6 Soil and Geology 41
4.7 Material Assets 44
4.7.1 Wastewater 45
4.7.2 Water supply 47
4.7.3 Waste Management 47
4.7.4 Transport 47
4.8 Landscape and townscape 48
4.9 Cultural Heritage 50
4.10 Key Environmental Issues 52
4.11 Evolution of the environment in the absence of the Variation 54
4.12 Inter-relationships 55
5 Strategic Environmental Objectives 56
5.1 Introduction 56
6 Consideration of alternatives 58
6.1 Introduction 58
6.2 Preferred Alternative identified for the South Dublin CDP 2022-2028 58
6.3 Variation: Consideration of alternatives 59
6.3.1 Background and context 59
6.3.2 Earlier Alternatives excluded on grounds of not being reasonable to achieve the objectives and scope of the plan (i.e. Variation). 60
6.3.3 Consideration of Alternatives Workshop 61
6.4 Preferred alternative 64
7 Significant Environmental Effects 65
7.1 Introduction 65
7.1.1 Approach to the assessment 65
7.2 SEA evaluation of the Variation 66
7.2.1 Population and human health 66
7.2.2 Biodiversity, Flora and Fauna 67
7.2.3 Climate Change 67
7.2.4 Water Resources including flooding 68

7.2.5 Soil and Geology 68
7.2.6 Material Assets 69
7.2.7 Landscape 69
7.2.8 Cultural heritage 70
7.3 Cumulative and in combination effects 70
7.3.1 Consideration of intra plan elements and cumulative impacts. 74
8 Mitigation measures 79
8.1 Introduction 79
9 Monitoring 99
9.1 Introduction 99
Annex A: SEA Evaluation of the Variation
Annex B: SEA Evaluation of Proposed Material Alterations

List of Tables

Table 1-1 STRUCTURE AND CONTENT OF THIS ENVIRONMENTAL REPORT 3
Table 2-1Scoping submissions and SEA response to Variation - 7
Table 4-1 Designated Ecological Sites and Protected Species: 27
Table 4-2 Current status of surface and groundwater within the local plan area (EPA 2025) 37
Table 4-3 Soil Types Covering the County 42
Table 4-4 Uisce Éireann Wastewater Treatment Capacity Register (August 2025) 45
Table 4-5Landscape Character Areas and Prospects for Protection 49
Table 4-6: Key Environmental Issues per SEA Topic 53
Table 4-7: Inter relationships 55
Table 5-1: Strategic Environmental Objectives 56
Table 6-1 Assessment of Alternative Scenarios: South Dublin County Development Plan SEOs 62
Table 7-1: Plans and Projects Considered for In Combination and Cumulative Effects 70
Table 8-1: Principal Environmental Protection Measures Identified in the South Dublin CDP 2022-2028 90
Table 9-1: SEA Monitoring Table from South Dublin County Development Plan 2022-2028 100

List of Figures

Figure 1-1 Variation Lands and Strategic Future Development Areas 2
Figure 3-1: Hierarchy of spatial planning in Ireland 14
Figure 4-1 Nature Conservation Areas 30
Figure 4-2 Green Infrastructure Map from South Dublin CDP 2022-2028 31
Figure 4-3 Population density (Census 2022) 32
Figure 4-4: The determinants of health and well-being in our neighbourhoods (Source: Human ecology model of a settlement, Barton and Grant, 2006) 33
Figure 4-5: Noise mapping for daytime noise from road 34
Figure 4-6 Noise mapping for daytime noise from rail 35
Figure 4-7 Nitrogen Oxide measurements at county scale (EPA 2025) 36
Figure 4-8: Surface Water Quality in and around Plan Area 38
Figure 4-9 Groundwater Vulnerability 39
Figure 4-10 Flood mapping (HEFS) and SDCC mapped Riparian Corridors 41
Figure 4-11 Soil Classification 43
Figure 4-12 Bedrock Geology 44
Figure 4-13 Significant material assets 48
Figure 4-14 Landscape Character Areas 50
Figure 4-15 Sites and monuments record, record of protected structures 51
Figure 4-16 Architectural Conservation Areas 52
Figure 7-1 Final lands rezoned under Variation No 2 within the Dodder Sub catchment (SC 010) 76
Figure 7-2 Final lands rezoned under Variation No 2 within the Liffey Sub catchment (SC 090) 77

This report has been prepared by Minogue Environmental Consulting Ltd with all reasonable skill, care and diligence. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid. This report is prepared for South Dublin County Council, and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

SEA ER V1	21st Jan 2026	Proposed Variation for review	EV and RM
SEA ER V2	11th February 2026	Proposed Variation for display	RM EV
SEA ER Final	18th November 2026	Final Variation as adopted	RM

1 Introduction and Context

1.1 Background

South Dublin County Council (SDCC) has prepared a Variation (Variation no 2) to the South Dublin County Development Plan (CDP) 2022-2028.

The SEA process was considered at each stage of the making of the Plan. Having considered the plan and supporting SEA ER and NIR, Variation no 2 of the South Dublin County Development Plan 2022 -2028 was approved by the Members of South Dublin County Council on the 19th October 2026 meeting.

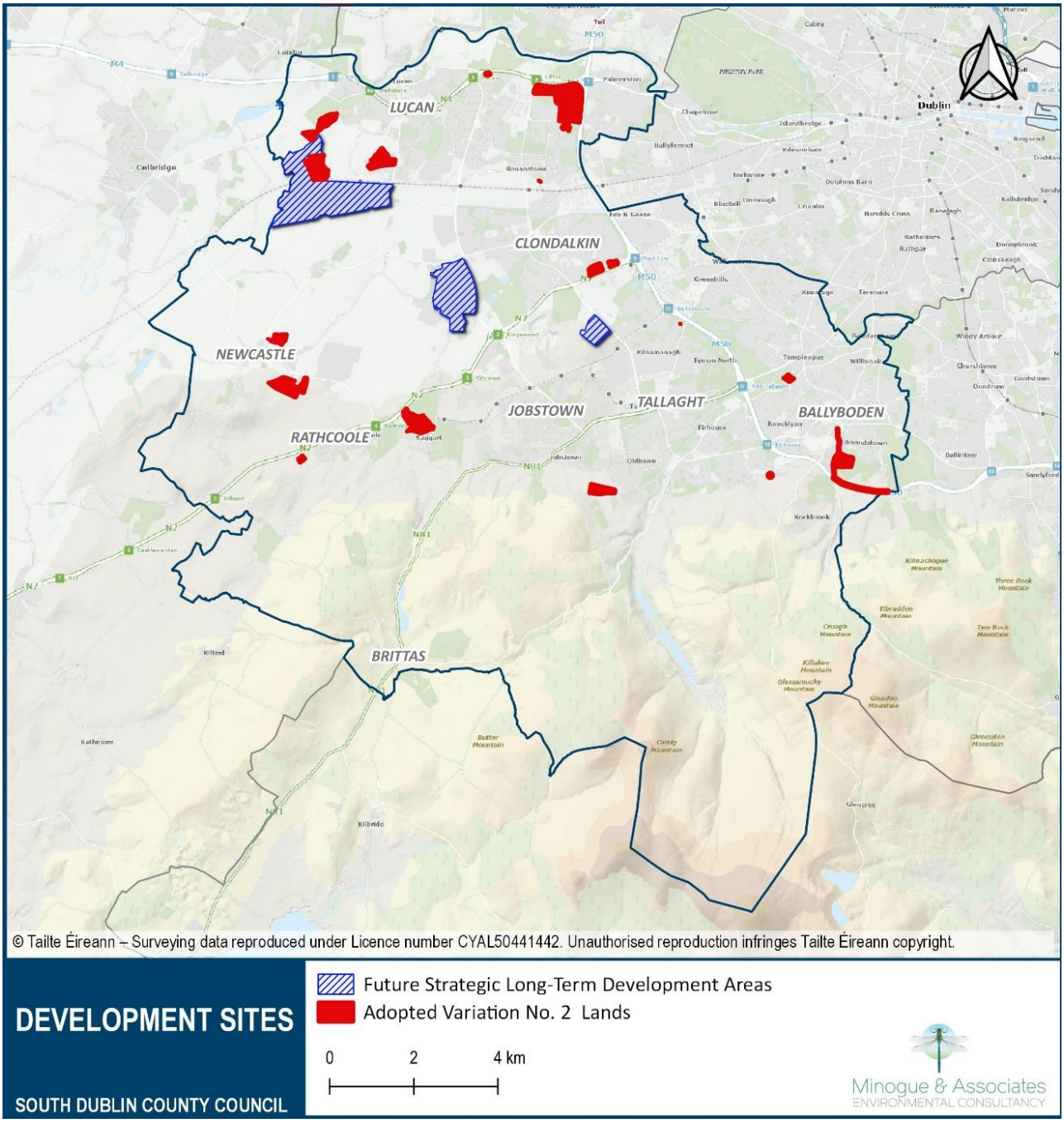
This is the final SEA ER prepared upon the adoption of Variation no 2. Proposed changes to the Variation following consultation were screened for SEA. Annex A and Annex B of this final SEA ER present the evaluation and SEA screening assessments on the proposed material alterations of Variation no 2. These demonstrate how proposed changes to the Variation as it progressed were evaluated through the SEA process.

Variation No. 2 of the South Dublin CDP 2022 -2028 as adopted will be made available by South Dublin County Council along with this final SEA ER, Non-Technical Summary and Natura Impact Report. The accompanying SEA Statement should be read as the final output from the SEA process and is available under separate cover.

1.2 Purpose of the Variation and Context

Figure 1.1 shows the final lands rezoned for residential use as part of Variation no 2.

Figure 1-1 Variation Lands and Strategic Future Development Areas



1.3 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other

strategic action, to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

Article 1 of the European Union Strategic Environmental Assessment (SEA) Directive (2001/42/EC) states that its objective is:

> *"to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development."*

The following Regulations transpose this Directive into Irish law[1]:

- The European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004),
- The European Union (Land use planning – Strategic Environmental Assessment) Regulations 2025 (S.I. 456 of 2025)

A Habitats Directive Assessment prepared under Article 6 (3) of the E.U. Habitats Directive accompanies the Variation and has informed the SEA Environmental Report.

1.4 Structure of this SEA ER

Regulations contained in Schedule 1 of S.I. 456 of 2025 details the information to be contained in an Environmental Report. Table 1.1 lists the information required and details where this information is contained in this Environmental Report.

Table 1-1 STRUCTURE AND CONTENT OF THIS ENVIRONMENTAL REPORT

Schedule 1 of Statutory Instrument 456 of 2025	Addressed in this SEA ER
(a) an outline of the contents and main objectives of the plan or programme and relationship with other relevant plans;	Chapter One Introduction and Chapter Two Methodology outlines contents and main objectives Chapter Three details the relationship with other relevant plans
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme	Chapter Four Baseline Environment provides this information
(c) the environmental characteristics of areas likely to be significantly affected	Chapter Four Baseline Environment provides this information
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those	Chapter Four Baseline Environment provides this information

[1] It is noted that new SEA Regulations SI 456 of 2025 have entered into force and revoke the above SI 436 of 2004, unless the variation process or statutory landuse process has already commenced.

Schedule 1 of Statutory Instrument 456 of 2025	Addressed in this SEA ER
relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive	
(e) the environmental protection objectives, established at international, European Union or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation	Chapter Five: SEA Objectives provides this information
(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Chapter Seven, Significant Effects on the Environment provides this information
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan;	Chapter Eight, Mitigation Measures provides this information
(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information	Chapter Six, Alternatives Considered provides this information and difficulties encountered are listed at the end of Chapter Two, Baseline Environment.
(i) a description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan or programme	Chapter Nine, Monitoring provides this information
(j) a non-technical summary of the information provided under the above	This is provided as a separate document to this Environmental Report but is also available

2 Methodology

2.1 Introduction

This chapter presents the SEA methodology in detail and outlines the steps required for SEA. The methodology used to carry out the SEA of the plan reflects the requirements of the SEA regulations and available guidance on undertaking SEA in Ireland, including guidance notes and best practice reports prepared by the Environmental Protection Agency and Department of Environment, Heritage and Local Government. A list of these documents is presented at the end of this report.

2.2 Stages in the SEA Process

The steps involved in SEA are as follows:

- Screening (determining whether SEA is required)
- Scoping (determining the range of environmental issues to be covered by the SEA)
- The preparation of an Environmental Report
- The carrying out of consultations
- The integration of environmental considerations into the Plan or Programme
- The publication of information on the decision (**SEA Statement**). The SEA Statement has been prepared and is provided under separate cover.

2.3 Screening

A SEA Screening was undertaken in line with the criteria provided in Schedule 2 of the SI 456 of 2025.

The Appropriate Assessment Screening Report prepared for the Variation determined that a Stage II AA of the Variation is required. The AA Screening report of the Variation showed that in the absence of appropriate mitigation measures, it cannot be ruled out that the Variation to the South Dublin County Development Plan 2022 -2028 and the future developments facilitated by it, will not have the potential to result in likely significant effects to the following European Sites and their qualifying features of interest including mobile species such as Brent Geese:

- Glenasmole Valley SAC
- Wicklow Mountains SAC
- Knocksink Wood SAC
- South Dublin Bay SAC
- North Dublin Bay SAC
- Rye Water Valley/Carton SAC
- Baldoyle Bay SAC

- South Dublin Bay & Tolka Estuary SPA
- North Bull Island SPA
- Ireland's Eye SPA
- Baldoyle Bay SPA
- Lambay Island SPA
- Skerries Island SPA
- Wicklow Mountains SPA

Due to the potential risk of such effects occurring following the implementation of the Variation, it was concluded that the Variation will have the potential to result in significant effects on European Sites. As such, a Natura Impact Report (NIR) is required to inform an Appropriate Assessment of the Variation. Therefore, the Variation proceeded to full SEA.

2.4 Scoping

The purpose of the SEA Scoping report is to identify the scope of the SEA and ensure that relevant data and environmental topics are included in the SEA. SDCC prepared a Strategic Environmental Assessment (SEA) Scoping Report regarding the emerging Variation. A formal notice was issued to the prescribed environmental authorities on 19th November 2025 to 9th December 2025 for three weeks, that SDCC will carry out an environmental assessment of the Proposed Variation and will prepare an environmental report of the likely significant effects on the environment of implementing the Variation. The main issues raised by consultees and the SEA response to the same is included below.

Table 2-1Scoping submissions and SEA response to Proposed Variation -

Consultee	Main Points	SEA response
Environmental Protection Agency ***SEA Section*** ***Office of Radiation Protection and Environmental Monitoring***	In preparing the Variation, South Dublin County Council should also ensure that the Variation aligns with key relevant higher-level plans and programmes and is consistent with the relevant objectives and policy commitments of the National Planning Framework and the Regional Spatial and Economic Strategy for the Eastern and Midlands Region. SEA resources and guidance, including: • SEA process guidance and checklists; • Inventory of spatial datasets relevant to SEA; • SEA of Local Authority Land-Use Plans - EPA Recommendations and Resources 2025 (Version 1.25	Noted. As the Variation sits under the South Dublin County Development Plan 2022-2028, existing policies and objectives from this plan will apply and are referenced in Chapter 8 Mitigation Measures of this SEA Environmental Report. National and Regional plans and programmes as relevant and listed in the SEA of Local Authority Land -Use Plans Version 1.25 listed will be included in Chapter 3 of the SEA Environmental Report.
Development Applications Unit, Dept of Housing, Heritage and Local Government	The NMS's website (www.archaeology.ie) is a key source of data, information and publications, including GIS datasets Recommended inclusion of various guidelines Framework and Principles for the Protection of the Archaeological Heritage (Government of Ireland 1999) and Cultural Heritage in the National Planning Framework report: Ireland 2040 – Our Plan | Strategic Environmental Assessment Scoping Report (Department of the Housing, Planning, Community and Local Government, 2018).	Noted. Datasets from Record of protected structures have been used in the environmental profile of the lands. Policies and plans are updated and referenced as relevant in Chapter 3. Note NPF has been updated under First Revision with updated Scoping Report.
	Any re-zoning of lands from the objectives set out for them in the 2022-2028 CDP incorporated in Proposed Variation, particularly from Objective OS 'To preserve and provide for open space and recreational amenities' or Objective RU 'To protect and improve rural amenity and to provide for the development of agriculture' to Objective RES-N 'To provide for new residential communities in accordance with approved area plans', may potentially lead to adverse effects on biodiversity, including on plants, animals and semi-natural and natural habitats, both in protected areas and outside them, as result of future development provided for by the re-zonings.	Noted. This is discussed in Chapter 7 Impact Assessment, and Annex A which provides a summary of environmental and ecology considerations for each of the lands. This is based on desktop research and includes aerial imagery review to indicate habitats on each land, protected species search from National Biodiversity Centre database and consultation with SDCC and this submission, distance to European and National protected sites and nearest water feature and quality.

Consultee	Main Points	SEA response
		This has informed mitigation as appropriate at strategic level, as shown in Chapter 8.
	In evaluating the potential effects on biodiversity of residential and associated development which may take place on lands re-zoned under Proposed Variation as part of the SEA of this variation of the CDP, attention in particular should focus on the possible effects on species such as otter, bat species and crayfish, afforded protection under the Habitats Directive (92/43/EEC), and species protected under the Wildlife Acts, 1976 to 2023, including plants subject to the Flora (Protection) Order 2022, Statutory Instrument S.I. No. 235/2022, and mammals such as badger, pine marten, stoat and Irish hare.	Noted, and agreed, please see above response.
	While it is unlikely any lands will be re-zoned for residential purposes in the close vicinity of the several European sites within the county, namely the Wicklow Mountains Special Area of Conservation (SAC), the Glenasmole Valley SAC and the Wicklow Mountains Special Protection Area (SPA) , because of their upland locations, it is likely areas may be re-zoned in the west of the county in the vicinity of the Grand Canal proposed Natural Heritage Area (pNHA) and possibly near or at least in the catchment of the Dodder Valley pNHA in the Firhouse-Old Bawn area. In order to minimize any adverse effects on these pNHAs which may ultimately result from the re-zoning of lands in their vicinity under Proposed Variation, mitigation set out in the SEA Report on the variation should include the retention of buffer corridors zoned as OS on either side of them to preserve the possibility for the migration of flora and fauna through these biodiverse areas. Such riparian buffer corridors should also be maintained along other stretches of rivers in the county if lands are re-zoned close to them, including along the Griffeen, Camac and the River Dodder as a whole	Noted, and agreed, please see above response. Mitigation is included which addresses buffer corridors, reflecting the Green and Blue strategy and identification of primary and secondary GI and BI corridors at county scale.
	Though as already referred to, any re-zonings proposed under Variation No. 1 are unlikely to be of lands in the vicinity of the European sites located in the county, the Appropriate Assessment (AA) to be undertaken in parallel with the SEA of the Proposed Variation should definitely seek to evaluate as far as possible the effects this may have on the ex-situ foraging within the county, of Special Conservation Interest (SCI) and	Agreed, please see accompanying Natura Impact Report to this Variation and summary of same in Chapter 7 of this SEA ER.

Consultee	Main Points	SEA response
	Qualifying Interest (QI) bird species for nearby Special Protection Areas. Peregrine falcon and merlin, SCI/QI species for the Wicklow Mountains SPA, at least outside the breeding season hunt over lowland sections of the county where lands may be re-zoned, and in the rural parts of the county, such as in the Baldonnel, Newcastle and Locktown areas, flocks of golden plover are regularly observed in winter, which may form part of the population of this species which frequents the North Bull Island SPA, for which it is a SCI/QI species	
	Similarly, the black-headed gull, a SCI/QI species for both the South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA, forages regularly both on agricultural lands and in parks and playing fields within suburbia in the South Dublin County Council administrative area. Flocks of light-bellied brent goose, also a SCI/QI species for these two Dublin Bay SPAs, are known as well to use playing fields in some of South Dublin's parks to graze on, and in addition may utilize some club or school pitches in the county. Increased human populations in the catchments of such amenities, arising from accelerated residential development facilitated by the Proposed Variation, as well as resulting in higher levels of disturbance of the brent geese by humans and dogs, may lead to proposals for the installation of artificial pitches to replace existing playing fields used by the geese.	Noted. Where existing data is available this is presented in the NIR for SCI/QI birds. Due to time constraints, additional surveys were not possible during the programme for the Proposed Variation Mitigation is provided for in Chapter 8 of this SEA ER and where relevant in the environmental profile and analysis of each of the lands in Annex A. Where site specific mitigation is identified for birds, and other protected species, these are included in site specific mitigation, presented in Chapter 8.
	It would be desirable, so as to facilitate more fully informed SEA and AA of the Proposed Variation and establish the baseline status of SCI/QI birds in areas to be re-zoned or on lands which might be affected by nearby re-zonings, if surveys of wintering birds could be undertaken before the drawing up of the SEA and AA Reports on the Proposed Variation at least on lands in the ownership of South Dublin County Council, such as those in parks or the lands owned by the Council in Brownstown, Peamount and Lockstown mainly to the west of Grange Castle West Business Park and near the Grand Canal pNHA.	Noted. Where existing data is available, this is presented in the NIR for SCI/QI birds. Due to time constraints, additional surveys were not possible during the programme for the Variation and are not required under the SEA Directive. Notwithstanding the above, specific mitigation, including the requirement for Ecological Impact Assessments, forms part of the existing mitigation in the South Dublin CDP 2022 -2028 and where identified through the SEA and AA process, site-specific

Consultee	Main Points	SEA response
		mitigation, including the requirement for ecological surveys are included in the adopted Variation. Information on Mitigation is provided for in Chapter 8 of the SEA ER and, where relevant in the environmental profile and analysis of each of the lands in Annex A. Where site-specific mitigation is identified for birds, and other protected species, these are included in site specific mitigation, presented in Chapter 8 of the SEA ER and NIR. The accompanying NIR identifies potential mobile species pathways for species such as Golden Plover on 3 sites, please see the relevant section in the NIR. Mitigation is provided for in Chapter 8 of this SEA ER and where relevant in the environmental profile and analysis of each of the lands in Annex A. Where site specific mitigation is identified for birds, and other protected species, these are included in site specific mitigation, presented in Chapter 8.
	In any case, provision should be made in the SEA Report on the Proposed Variation for surveys of any lands re-zoned under this variation for wintering birds , breeding birds, bats, terrestrial mammals, protected and invasive plants, and natural an semi-natural habitats, before the area plans to guide the development of these lands for residential and associated purposes are finalised.	See above response
Kildare County Council	Acknowledgement of Scoping report and correspondence	Noted

2.5 Baseline Data

The baseline data assists in describing the current state of the environment, facilitating the identification, evaluation, and subsequent monitoring of the effects of the Variation. It helps identify Issues and Threats in and around the strategy area and in turn these can be quantified (for certain environmental parameters) or qualified. This highlights the environmental issues relevant to each SEA parameter and ensures that the strategy implementation does not exacerbate such problems. Conversely this information can also be used to promote good environmental practices and opportunities for environmental enhancement, thereby improving environmental quality where possible.

Baseline data was gathered for all parameters. Data was gathered from the SEA Environmental Report of the South Dublin County Development Plan 2022-2028, SEA ER of the South Dublin Climate Action Plan 2024 -2029, Uisce Éireann, the EPA, National Parks and Wildlife Service, National Biodiversity Centre, Met Éireann and other sources as appropriate. Footnotes throughout the document, particularly in Chapter Four present the reference and source.

2.5.1 Preliminary environmental profile of Variation lands

Annex A provides a summary of preliminary environmental considerations for each of the lands. A polygon-based search of the approximate boundaries of these lands was undertaken using the National Biodiversity Centre (NBDC) to identify records of protected species. This data, whilst validated by the NBDC represents observations specific to the date of observation. The absence of a record of protected species does not automatically mean the species is absent from the site. The records of protected species were filtered to provide results from the past 10 years (2015-2025).

Likewise, a review of aerial imagery was undertaken to identify landuse and preliminary habitat classifications after Fossitt Habitat classification system[2]. The profile of the Variation lands present information on designated sites, including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), and proposed Natural Heritage Areas (NHAs), Liffey Vally Special Amenity Area (SAA) as well as the nearest surface water feature and corresponding water quality status in accordance with Water Framework Directive data. Proximity to Record of Protected Structures and Architectural Conservation Areas is also identified, based on Geographic Information System (GIS) analysis and desktop assessment. Further input from South Dublin County Council provided additional information on these lands as relevant.

The environmental profiles presented in Annex A are intended to support preliminary site descriptions and are based on desktop research and GIS analysis. They do not replace or override site-specific investigations, which should be appropriately scoped and carried out by suitably qualified specialists.

[2] Fossitt, J (2000) *A Guide to Habitats in Ireland.* Heritage Council.

2.5.2 Geographical Information Systems

The SEA has also used a Geographical Information System (GIS) in the following ways:

- To provide baseline information on a range of environmental parameters;
- To assist in assessment of alternatives;
- To help assess in-combination or cumulative impacts, and
- To provide maps to illustrate environmental parameters in the SEA Environmental Report.

2.6 Approach to assessment of significant environmental impacts

The principal component of the SEA involves a broad environmental assessment of the objectives of the Variation. A methodology that uses the concept of expert judgement, public consultation, GIS and matrices, both to assess the environmental impact and to present the conclusions has been adopted in this SEA.

Key to assessing the above is setting a specific set of environmental objectives for each of the environmental topics. The objectives are provided in Chapter Five and include all aspects of the environment such as Cultural heritage, Population and Human health, and Biodiversity, Flora and Fauna.

The assessment described within this Environmental Report aims to highlight the potential conflicts, if they are present, between the objectives in the Variation with the Strategic Environmental Objectives. Furthermore, the assessment examines the potential impact arising from the plan's implementation on sensitive environmental receptors.

The SEA Directive requires that information be focused upon relevant aspects of the environmental characteristics of the area likely to be significantly affected by the plan and the likely change, both positive and negative, where applicable.

Chapter Seven provides a discussion, where relevant, on the significance and type of the identified impact in accordance with current guidelines.

The SEA legislation and guidelines highlight the importance of the integration between the preparation of the Variation and the SEA, AA and SFRA processes. The iterative nature of the SEA process is such that the plan is informed by environmental considerations throughout the preparation of the plan. The Habitats Directive requires, inter alia, that plans and programmes undergo AA screening to establish the likely or potential effects arising from implementation of the plan. If the effects are deemed to be significant, potentially significant or uncertain then the plan must undergo Stage 2 AA. The preparation of the Variation, SEA and AA are taking place concurrently and the findings of the AA have informed both the SEA and the Variation itself. The Natura Impact Report is a separate document to the Environmental Report and has been integrated as appropriate. The Strategic Flood Risk Assessment (SFRA) of the Variation prepared by JBA Ireland has informed this SEA ER as appropriate.

2.7 Mitigation

Section (g) of Schedule 1 of the SEA Regulations 2025 requires information on the mitigation measures that will be put in place to minimise/eliminate any significant adverse impacts due to the implementation of the strategy. Chapter Eight of this SEA ER highlights the mitigation measures that will be put in place to counter identified significant adverse impacts due to the Variation's implementation.

The Variation has been prepared having regard to the environmental protection objectives contained within the South Dublin CDP 2022 -2028. However, some unavoidable residual issues may remain, and therefore mitigation measures are required. Chapter Eight details the mitigation measures necessary to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Variation.

2.8 Monitoring

Article 10 of the SEA Directive and Section 13 of SI 456 of 2025 set out the requirement that monitoring is to be carried out of the significant environmental effects of the implementation of the strategy to identify at an early stage any unforeseen adverse effects and to be able to undertake appropriate remedial action. Chapter Nine presents the monitoring requirements for the Variation, aligned with those of the SEA of the South Dublin CDP 2022-2028.

2.9 Data Gaps

Data gaps are present in terms of human health and population for Variation lands and environs. More broadly, understanding the interactions between climate change, weather events, and impacts on water and biodiversity is complex. As Section 2.5.1 states, desktop research was undertaken on the subject lands to provide additional baseline information and provide additional mitigation, as deemed appropriate, these complement the existing environmental protection measures already included in the South Dublin CDP 2022 -2028.

3 Relationship to Plans and Programmes

3.1 Introduction

Under the SEA Directive, the relationship between the Variation and other relevant plans and programmes must be considered. The Variation must be considered within the context of a hierarchy of policies, plans and strategies which include international, national, regional and local level policy documents. These documents set the policy framework within which the Variation will operate. The hierarchy of spatial planning within Ireland is summarised below in Figure 3.1.

Figure 3-1: Hierarchy of spatial planning in Ireland



National

- National Planning Framework First Revision (DHLGH)
- NPF Implementation: Housing Growth Requirements - Guidelines for Planning Authorities 2025 (DHLGH)
- Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities 2024 (DHLGH)
- The Planning System and Flood Risk Management – Guidelines for Planning Authorities 2009 (DEHLG)
- Urban Development & Building Heights Guidelines for Planning Authorities (DHLGH)
- Planning Design Standards for Apartments Guidelines for Planning Authorities, (DHLGH)
- National Biodiversity Plan 2023-2030 (DHLGH)
- Climate Action Plan 2025(DECC)
- Sectoral Climate Change Adaptation Strategies and Low Carbon Roadmaps

- National Mitigation Plan (DECC)
- National Adaptation Framework (DECC)
- National Policy Position on Climate Action and Low Carbon Development (DECC)
- EU Climate Adaptation Strategy 2021
- National Broadband Plan (DECC)
- National Renewable Electricity Policy Framework (in preparation DECC)
- Grid 25 Implementation Strategy (Eirgrid)
- Framework for Alternative Fuel Infrastructure in Transport (DoT)
- National Bioenergy Plan (DECC)
- National Landscape Strategy (DHLGH)
- All Island Strategic Rail Review (in preparation)
- Strategic Framework for Integrated Land Transport (DoT)
- National Greenway Strategy (DoT)
- State of the Environment Report 2024 (EPA)
- Waste Action Plan for a Circular Economy (DECC, 2020)
- National Hazardous Waste Management Plan (EPA, in preparation)
- Water Action Plan 2024: River Basin Management Plan for Ireland (DHLGH)
- National Marine Planning Framework (DHLGH)
- Water Services Strategic Plan (Irish Water)
- Capital Investment Programme (Irish Water)
- Water Resources Management Plan (Irish Water)
- National CFRAMS Programme (OPW)
- *Framework and Principles for the Protection of the Archaeological Heritage (Government of Ireland 1999*[3]).

3.1.1 Regional and Local

- Regional Spatial and Economic Strategy for Eastern Region
- Relevant CFRAMS Flood Risk Management Plan (OPW)
- Pollution Reduction Programmes for Shellfish Waters (DHPLG)
- Regional Waste Management Plan (CUWR)
- National Investment Framework for Transport Investment (DTTAS)
- National River Basin Management Plans (DHPLG)
- GDA Strategy for 2022- 2042 (NTA)
- South Dublin County Development Plan 2022 to 2028 and associated environmental assessments including SEA Environmental Report (ER), Natura Impact Report (NIR) and Strategic Flood Risk Assessment (SFRA).
- Biodiversity Action Plan (BAP) for South Dublin County - Connecting with Nature 2020-2026,
- South Dublin Climate Action Plan 2024-2029

[3] Inserted on foot of SEA Scoping submission by Dept of Housing, Local Government and Heritage.

- Neighbouring local authorities: Dublin City Development Plan 2022-2028, Dún Laoghaire Rathdown County Development Plan 2022-2028, Kildare County Development Plan 2023-2029, Fingal County Development Plan 2023 -2029, Wicklow County Development Plan 2022-2028 and associated environmental assessments including SEA Environmental Report (ER), Natura Impact Report (NIR) and Strategic Flood Risk Assessment (SFRA).

3.2 Key implications and principles arising from the Plan, Policy and Programme Review

Arising from the review, several key principles and implications for the SEA ER can be distilled. Objectives developed for the South Dublin County Development Plan 2022-2028, are applied in the SEA as appropriate. In addition, the key environmental messages identified in the EPA State of the Environment report for 2024 are presented where relevant to align the key principles with these key environmental messages and challenges for the environment. Please see Table 3.1 overleaf

TABLE 31 KEY PRINCIPLES AND IMPLICATIONS FOR THE SEA OF THE VARIATION TO DUBLIN CDP 2022 -2028 AND EPA IRELAND'S ENVIRONMENT 2024.

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
Biodiversity (Flora & Fauna) (B)	(B_1) Preserve, protect, maintain and where appropriate, restore the terrestrial, aquatic and soil biodiversity, of international, EU and nationally designated sites, protected species and habitats. (B_2) Ensure no adverse effects on the integrity of any European site, regarding its qualifying interests, associated conservation status, structure and function. (B_3) Maintain and where appropriate, enhance the biodiversity value of local designated and non-designated ecological and heritage areas, which function as stepping-stones for migration, dispersal and genetic exchange of wild species. (B_4) Enhance biodiversity in line with the National Biodiversity Strategy and its targets.	Nature 1. The Irish landscape is heavily modified by humans. Many of the few remaining natural and semi-natural habitats are in a poor or bad state. Research in Ireland highlights that 85% of our protected habitats and almost one third of our protected species of flora and fauna are in unfavourable status, over half our native plant species are in decline and more than 50 bird species are of high conservation concern. The leading causes of these declines are changes in agricultural practices, including intensification; pollution; the increasing spread of invasive species; and our changing climate Nature 4. Nature can recover if given the opportunity.	Goal 3: Ensure healthy lives and promote well-being for all at all ages. Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 13: Take urgent action to combat climate change and its impacts. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Population & Human Health (PHH)	(PHH_1) Provide high quality residential, community, working and recreational environments with access to sustainable transport options . (PHH_2) Promote economic growth to encourage retention of working age population	Environment, Health and Wellbeing 1. Our health and wellbeing is inextricably linked to our surrounding environment. The health benefits of a vibrant natural	Goal 3: Ensure healthy lives and promote well-being for all at all ages. Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all.

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
	and funding of sustainable development and environmental protection. (PHH_3) Ensure that existing population and planned growth is linked with the required infrastructure and the services (PHH_4) Protect human health and well-being from environment-related pressures.	world are countless, providing us with breathable air, drinkable water, productive soils and spaces for us to spend time in and enjoy, enhancing both our physical and mental health and wellbeing. 2. The harmful environmental exposures causing disease and early death are modifiable. Reducing pollution, adapting to and mitigating climate impacts, and restoring ecosystems can have enormous benefits for our health and wellbeing. Solutions that can help tackle one issue can have multiple co-benefits for others. Implementation of solutions that can maximise benefits across multiple domains should be prioritised. 3. The impacts of environmental hazards and exposures are not equal across society. More efforts are required to assess inequalities in both levels of exposure and impact at a finer geographical scale to determine whether measures implemented are helping to bridge the gap.	Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns. Goal 13: Take urgent action to combat climate change and its impacts. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
Land, Soils & Geology (SG)	(LSG_1) Safeguard sensitive soil, resources and geological heritage sites against pollution and degradation. (LSG_2) Promote the sustainable use of infill and brownfield sites over the use of greenfield within the city.	Soils 2. The protection of soils lacked a legal and policy framework until recently and the publication of the EU Soil Strategy in 2021 and the proposed soil monitoring law in 2023 are significant. Ireland faces challenges in achieving the objectives of the EU Soil Strategy and in implementing the proposed soil monitoring law. However, getting this right would significantly advance the protection of Ireland's soil health.	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns. Goal 13: Take urgent action to combat climate change and its impacts. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
Water Quality (W)	(W_1) Protect and where necessary improve and maintain water quality and the management of watercourses and groundwater and coastal waters in compliance with the requirements of the Water Framework Directive objectives and measures. (W_2) Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion. (W_3) Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals.	Water 2. We need to see full implementation of existing environmental legislation and high compliance rates across all regulated activities. A regulatory regime to address activities that impact hydromorphology is also required. All measures must be sufficiently targeted to the water quality issue and location to ensure that they deliver improvements. 4. It is essential to build climate resilience into water quality management and into water services. Plans – such as the Water Action Plan, the Water Quality and	Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts. Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
		Water Services Climate Adaptation Plan, and Uisce Éireann's National Water Resources Plan – are key to identifying risks and adaptation measures.	
Air Quality & Noise (AN)	(AN_1) To avoid, prevent or reduce harmful effects on human health and the environment, resulting from emissions to air from all sectors- with particular reference to emissions from transport, residential heating and industry. (AN_2) Minimise travel related emissions and encourage a modal change from car to more sustainable forms of transport. (AN_3) Minimise noise emissions associated with traffic and transport and other noise and wind related industry etc.	Air: 2. Currently, Ireland is not meeting the guidelines set by WHO for multiple pollutants including fine particulate matter and nitrogen dioxide. We can actively improve our local air quality by changing to more sustainable forms of transport and heating. Noise 1 : Environmental noise is the second biggest environmental cause of health problems in the EU. In Ireland, over 1 million people are likely to be exposed to noise levels above the mandatory reporting threshold	Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts.
Climate Change (CC)	(CC_1) Minimise contribution to Climate Change by adopting mitigation and adaptation measures. (CC_2) Integrate sustainable design solutions into the city's infrastructure (e.g. energy efficient buildings; green infrastructure).	Climate change 1. The science is clear – climate change is already having an impact on people, animals and plants in Ireland. The evidence is	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns.

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
	(CC_3) Contribute towards the reduction of greenhouse gas emissions in line with national targets. (CC_4) Encourage and promote development resilient to the effects of climate change. (CC_5) Promote the use of renewable energy, energy efficient development and increased use of public transport.	unequivocable, Ireland is being affected by climate change now, and the severity of the impacts is likely to increase significantly in the coming years. 2. Ireland needs to be resilient to ongoing and future climate change impacts. The implementation of climate adaptation measures is currently too slow and fragmented. More cross-sectoral and integrated adaptation actions can deliver multiple benefits. Doing better requires more financing, working with people and nature, monitoring and evaluating outcomes and increasing public and private sector involvement. 3. Ireland is not currently projected to achieve its 2030 emissions reduction targets or to meet national or EU reduction targets. Despite Irish climate action ambitions, significantly faster progress is needed to decarbonise all sectors of Ireland's economy and implement adaptation actions to deliver a resilient and sustainable future for the benefit of all society.	Goal 13: Take urgent action to combat climate change and its impacts.

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
		4. It is critical that people and communities are supported to achieve the changes required to address climate change. To overcome the practical barriers to climate action, and to ensure that objectives are both achievable and equitable, understanding the beliefs, attitudes and challenges facing people in Ireland is crucial. Policy should be designed and implemented so that the desirable action becomes the default action	
Cultural Heritage (CH)	(CH_1) Protect places, features, buildings and landscapes of cultural, archaeological and / or architectural heritage from adverse impact from development	1. Our health and wellbeing is inextricably linked to our surrounding environment. The health benefits of a vibrant natural world are countless, providing us with breathable air, drinkable water, productive soils and spaces for us to spend time in and enjoy, enhancing both our physical and mental health and wellbeing	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts.
Landscape & Visual (LV)	(LV_1) Protect and maintain the special qualities of the landscape character, especially with regard to areas of high amenity, the Dublin Mountain Area, and the River Liffey and River Dodder Valleys.	Land 2. We cannot make more land, so must use our land wisely. Part of this challenge is to understand how best to use our land for social and economic benefit in a way that supports, rather than damages, the environment. The national land	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 13: Take urgent action to combat climate change and its impacts.

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
		use review has a vital role to play in identifying land use opportunities and constraints. Land 3. Land use offers natural, social and economic benefits. We can use our land in ways that support climate action, nature restoration, protection of water quality and a sustainable economy through implementing a multiple benefits approach. To do this we must reframe how we approach national land use decisions. We must take a holistic and integrated view across all the demands there are on Ireland's land. Emerging evidence shows that we can implement solutions that deliver natural, social and economic capital together.	
Material Assets (MA)	(MA_1) Make best use of existing infrastructure, promote the sustainable development of new infrastructure to match population distribution and protect existing assets, to meet the needs of South Dublin's population. (MA_2) Promote the circular economy, reduce waste, and increase energy efficiencies.	Transport: 1. The transport sector is a major consumer of energy and material resources and is a source of environmental pollution, particularly greenhouse gases, air pollutants and noise. 2. A sustainable, accessible and efficient transport system is not only important for the environment and wellbeing but is	Goal 6: Ensure availability and sustainable management of water and sanitation for all. Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. Goal 12: Ensure sustainable consumption and production patterns.

SDCC Development Plan Strategic Environmental Objectives (SEOs)		EPA Ireland's Environment 2024	UN Sustainable Development Goals
	(MA_3) Ensure there is adequate sewerage and drainage infrastructure in place to support new development. (MA_4) A reduction in energy demand from the transport sector and support moves to electrification of road and rail transport modes	also a key enabler for the economy. 3. High-level integration between land use planning and transport planning is needed to achieve more compact development, incentivise a move away from private cars, and move trips to rail, bus, cycling and walking. Shifting to these modes is an essential part of a sustainable and climate-neutral transition for the transport sector Energy: 1. Established technologies, such as wind energy, solar photovoltaics and bioenergy, will be key in meeting short-term emission reduction targets (i.e. 2030), whereas significant growth in offshore wind infrastructure is expected to be the key essential element of future energy systems. Enhanced regulatory and planning frameworks, and support schemes, are required to accelerate the deployment of renewables, realise co-benefits and manage trade-offs.	Goal 13: Take urgent action to combat climate change and its impacts. Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

SDCC Development Plan Strategic Environmental Objectives (SEOs)	EPA Ireland's Environment 2024	UN Sustainable Development Goals
	2. Growing demand for electricity is an anticipated by-product of the expected electrification of the heat and transport sectors. However, additional and rapidly increasing electricity demand growth from large energy users is putting pressure on energy systems. Circular Economy and Waste 1. Ireland has a damaging linear economy characterised by the overconsumption of materials and goods and the growing volumes of waste and greenhouse gas emissions. While recycling tonnages are increasing, these increases are being cancelled out by the growing amount of waste generated. Current trends pose a high risk of not meeting mandatory recycling targets. The challenge for Ireland is to reverse these trends and significantly reduce waste production. 2. Ireland's capacity to collect and treat waste is vulnerable and underperforming, with an over-reliance on other countries to treat our recycling materials, general municipal and hazardous wastes	

.

4 Key Environmental Resources

4.1 Introduction

The purpose of this section is to provide a summary of the main environmental resources and issues within the plan area.

4.2 Biodiversity, Flora and Fauna

The SEA considered available information on designated sites of conservation interest as well as protected species, ecological connectivity and non-designated habitats which have high ecological value. The SEA also identifies data sources which may be appropriate to local, project-level development and assessments.

There are several considerations for nature conservation designations in South Dublin as shown below in Table 4.1.

Table 4-1 Designated Ecological Sites and Protected Species:

Environmental Features	Description
Special Areas of Conservation (SACs)	Designated under the Habitats Directive (Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). There are 2 SACs designated within, partially within or adjacent to the County, including: Glenasmole Valley SAC (001209) and Wicklow Mountains SAC (002122).
Special Protection Areas (SPAs)	Designated under the Birds Directive (EC Directive 200/147/EC on the conservation of wild birds). There is one SPA designated within, partially within or adjacent to the County, including Wicklow Mountains SPA (004040).
RAMSAR sites	The Convention of Wetlands of International Importance, especially as Waterfowl Habitat was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares. There are 2 Ramsar sites designated near the County boundary; Sandymount Strand/Tolka Estuary and North Bull Island.
Natural Heritage Areas (NHAs)	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.
Proposed Natural Heritage Areas (pNHAs)	pNHAs were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats. There are 7 pNHAs designated within or partially within the County, including: Glenasmole Valley (001209), Slade of Saggart and Crooksling Glen (000211), Grand Canal (002104), Lugmore Glen (001212), Dodder Valley (000991), Liffey Valley (000128) and Royal Canal (002103).

Tree Preservation Order (TPO)	Part XIII of the Planning and Development Act, 2000 sets out the provisions for TPOs. Under the new Planning and Development Act 2024, TPOs are legislated for in Section 267. This part of the 2024 Act is due to be commenced in 2026 TPOs can be made in the interest of amenity or the environment and allow for the protection of individual or groups of trees. There are 4 existing TPOs within the County, including St. Brigid's Clondalkin; Beaufort Downs, Rathfarnham; Quarryvale, Brooklawn, Liffey Valley No.1; and Coolamber Site.
Flora Protection Order Sites	The Flora (Protection) Order, 2022 (S.I. No. 235 of 2022) gives legal protection to 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). The current list of plant species protected by Section 21 of the Wildlife Act, 1976 is set out in the Flora (Protection) Order, 2022, which supercedes orders made in 1980, 1987, 1999 and 2015. There are 8 Flora Protection Order Sites designated in the County (Killakee; Seahan-Secawn; Lucan Demesne; River Liffey in St. Edmundsbury; Palmerston Marsh (within Waterstown Park); between King's Hospital School and the Liffey at Fonthill; Tandy's Lane, Finnstown within the Adamstown Special Development Zone (SDZ); and Glenasmole.
Wildfowl Sanctuaries (See S.I. 192 of 1979)	Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries. There is one Wildfowl Sanctuary located within the County (Brittas Ponds (WFS-18)).
Salmonid Waters	Salmonid waters are designated and protected as under the European Communities (Quality of Salmonid Waters) Regulations 1988 (SI No. 293 of 1988). Designated Salmonid Waters are capable of supporting salmon (Salmo salar), trout (Salmo trutta), char (Salvelinus) and whitefish (Coregonus). The Grand Canal and the Rivers Liffey and Dodder are listed under the regulations.
OSPAR Marine Protected Areas (MPA)	Under the OSPAR Convention to Protect the Marine Environment of the North East Atlantic, Ireland committed to establishing marine protected areas to protect biodiversity (i.e., OSPAR MPAs). There are currently 19 OSPAR sites proposed in the State. There are no OSPAR MPAs within the County.
CORINE Landcover	Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. The most dominant land cover types are urban fabric/artificial surfaces to the north and east, agricultural areas/pastures to the west and forest and semi-natural areas to the south of the County. The south and west of the county includes the highest concentration of land cover categories indicating elevated levels of value to ecology (including peat bogs, forests and land principally occupied by agriculture with areas of natural vegetation)
National Parks	National Parks are specially designated protected areas of unspoilt beauty and there are six located in Ireland. The primary purpose of the National Parks is the conservation of biodiversity and landscape; however, they also provide recreational space for locals and visitors. There is 1 National Parks located within or partially within the County; Wicklow Mountains National Park.
Nature Reserves	A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State, but some are owned by organisations or private landowners. There is no Nature Reserves located within or partially

	within the County, however, the closest Nature Reserve within a 15 km radius of the County includes Knocksink Wood and North Bull Island.

Additionally, the SEA considered non designated sites for impacts regarding aspects such as ecological connectivity and non-designated habitats.

4.2.1 Ecological Connectivity and Non-designated Habitats

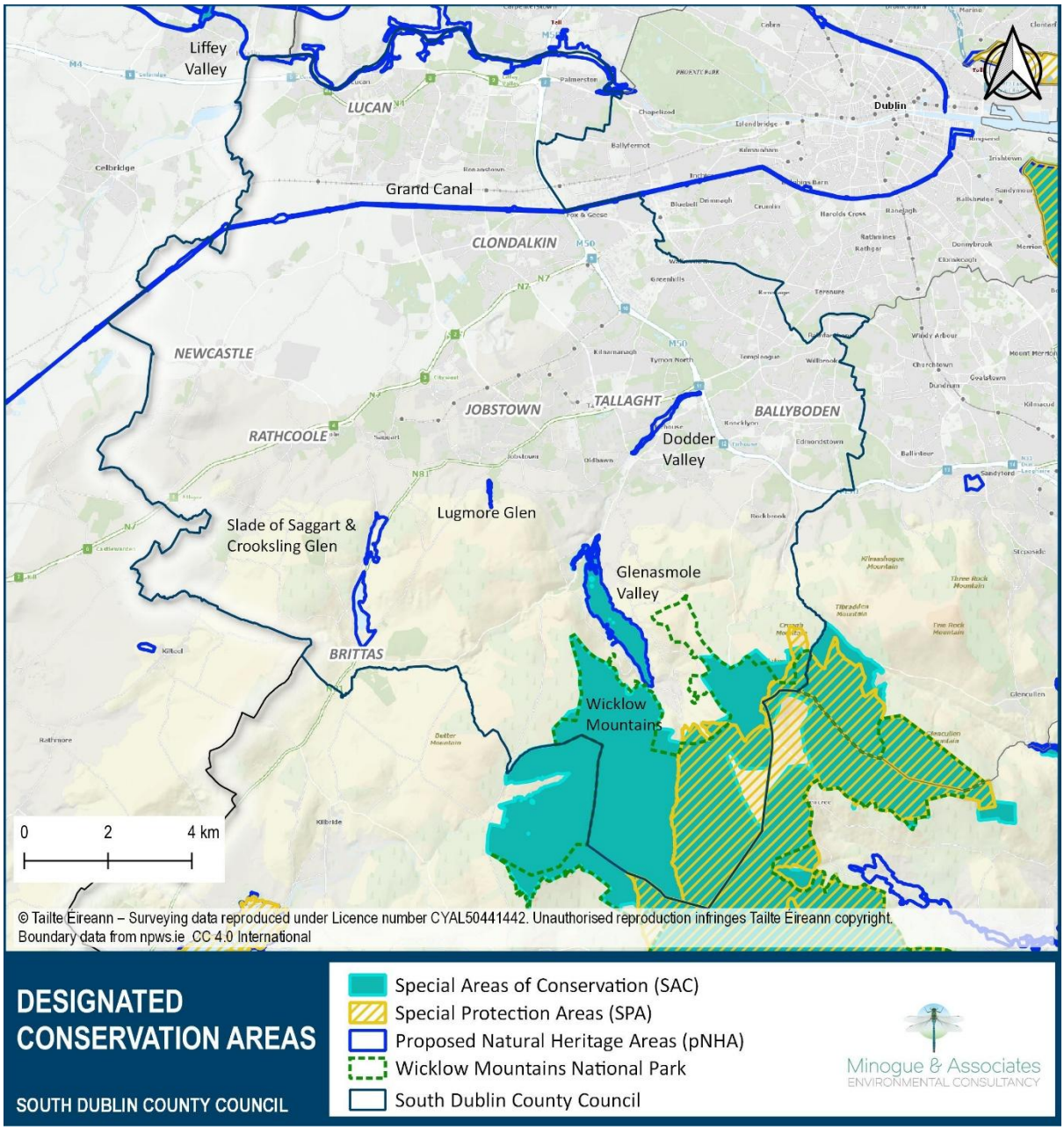
	Description
Ecological connectivity and networks (including steppingstones and corridors)	Riparian habitats, hedgerows and other blue and green infrastructure networks. Ecological connectivity and networks is a key consideration along with invasive species - particularly those listed on the Third Schedule to the European Communities (Birds and Natural Habitats) Regulations 2011 [S.I.477/2011].
Other sites of high biodiversity value or ecological importance	Semi-natural habitats in NPWS national surveys (native woodlands, reef systems, tidal habitats, grasslands, peatlands etc.). Trees and woodlands of national importance have been identified.

As well as considerations related to European sites - a focus was placed on protected species outside of these designations such as bats, breeding birds, badgers etc. as well as all related species listed within the Flora (Protection) Order, 2022 (S.I. No. 235 of 2022).

4.2.2 Designated Sites

Designated sites for natural heritage are presented below in Figure 4.1 at 5km, 10km and 15km buffers. These are described and assessed in more detail through the Stage II Appropriate Assessment Natura Impact Report that accompanies this SEA ER.

Figure 4-1 Nature Conservation Areas



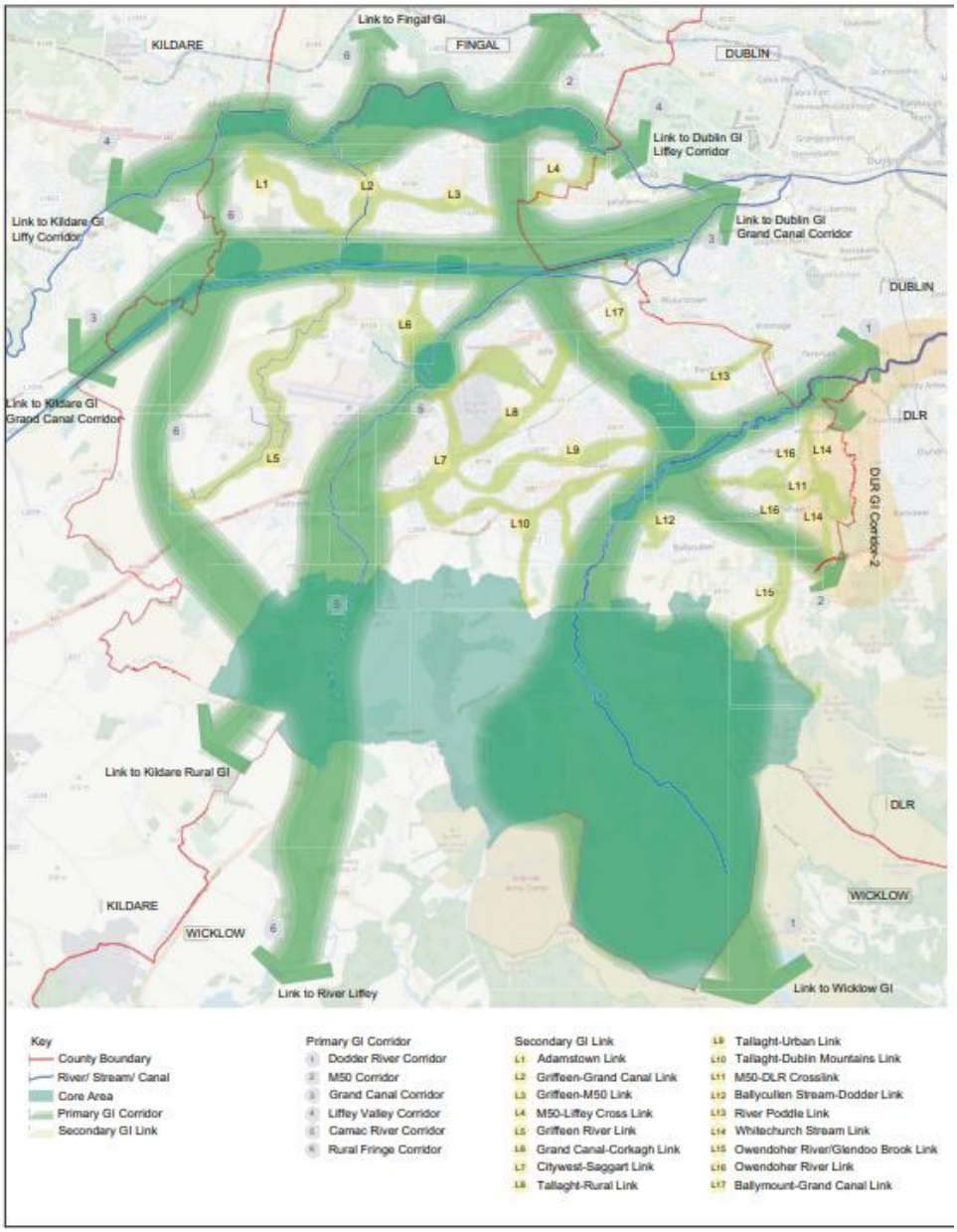
4.2.3 Green Infrastructure

Green infrastructure (GI) is a crucial component in building resilient communities capable of adapting to the consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality. The Green Infrastructure strategy for the County set out in the South Dublin CDP 2022 -2028 provides a vision of an integrated GI network for the County working with and enhancing existing biodiversity and natural heritage, improving resilience to climate change and enabling the role of GI in delivering sustainable communities to provide environmental, economic and social benefits.

The existing Green Infrastructure in the County boasts many key features and activities across the urban, rural and upland areas. Many of these are iconic in nature, including the Grand Canal, Glenasmole Valley, the Wicklow Mountains and the numerous rivers, streams, parks and open spaces of County and regional significance. See Figure 4.13 below for GI primary and secondary corridors for the county.

Figure 4 2 Green Infrastructure Map and primary, secondary corridors from South Dublin CDP 2022 -2028

Figure 4-2 Green Infrastructure Map from South Dublin CDP 2022-2028

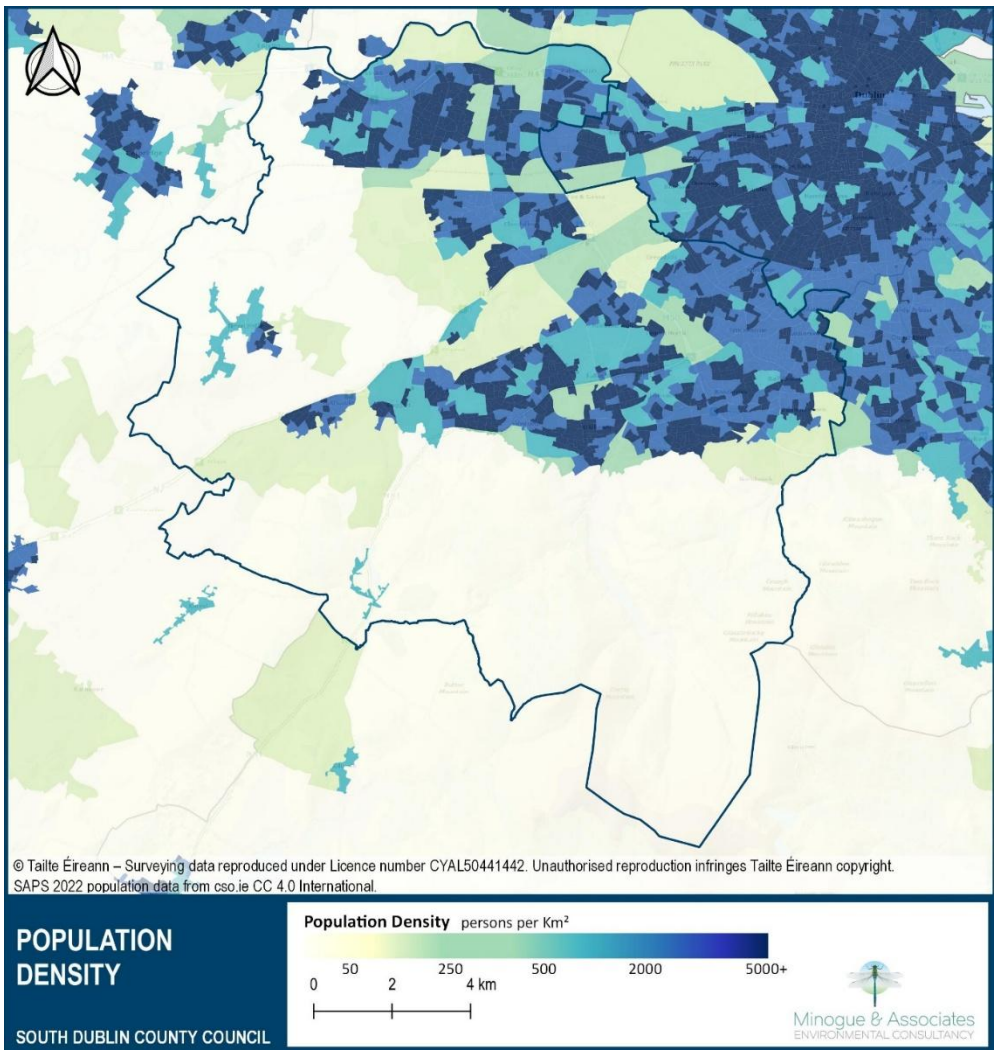


4.3 Population and Human Health

In the 2022 Census, the total population of South Dublin was 301,075 persons, showing the trend of an increase in total population in the County by ca. 8.0% (22,308 persons) since the previous Census. South Dublin is identified by the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019-2031 as being part of the Dublin Metropolitan Area. The transitional population projection for the Dublin Metropolitan Area until 2031 is 1.65 million persons. The NPF First Revision 2025 updated the population projections to 2040 and for the Eastern and Midland Region: approximately 470,000 additional people between 2022 and 2040 (c. 690,000 additional people over 2016-2040) i.e. a population of almost 3 million is projected to 2040. Dublin City and Suburbs population growth of 295,000 from 2022-2040 to c.1.56m total.

The main population settlements within the county are Dublin City and Suburbs, Saggart, Rathcoole and Newcastle. Figure 4.3 presents population density based on 2022 Census data.

Figure 4-3 Population density (Census 2022)



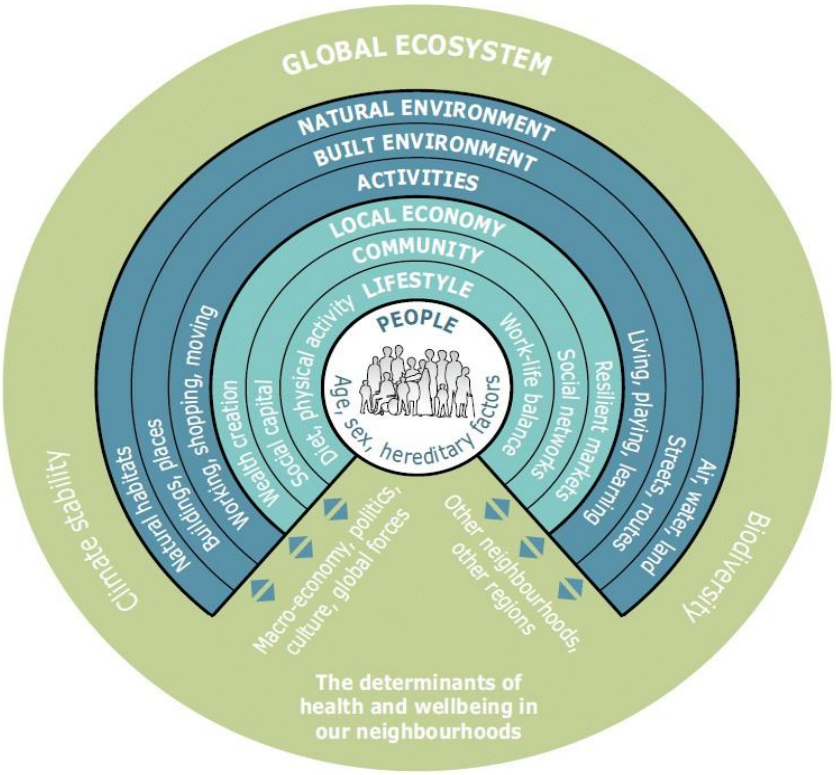
4.3.1 Human health-

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses, for example.

Access to services, community facilities and green space are also important for human health. The Variation will likely lead to increased population and potential interactions in terms of water services, wastewater treatment and capacity.

Figure 4.4 presents the determinants of human health and wellbeing, highlighting the interactions between environmental quality, social factors and human health and wellbeing.

Figure 4-4: The determinants of health and well-being in our neighbourhoods (Source: Human ecology model of a settlement, Barton and Grant, 2006)



4.3.2 Noise and human health

South Dublin includes a number of transport routes such as rail and road that are included in Strategic noise mapping required under the Environmental Noise Directive (END). The aim of the END is to provide a common framework to avoid, prevent or reduce, on a prioritised basis, the harmful effects of exposure to

environmental noise through the preparation of strategic noise maps and the development and implementation of action plans. The identification of noise sensitive areas allows for the application of protectives measure or mitigation measures in advance of further development. Figures 4.5 and 4.6 overleaf presents Noise Mapping from Road and Rail sources respectively.

Figure 4-5: Noise mapping for daytime noise from road

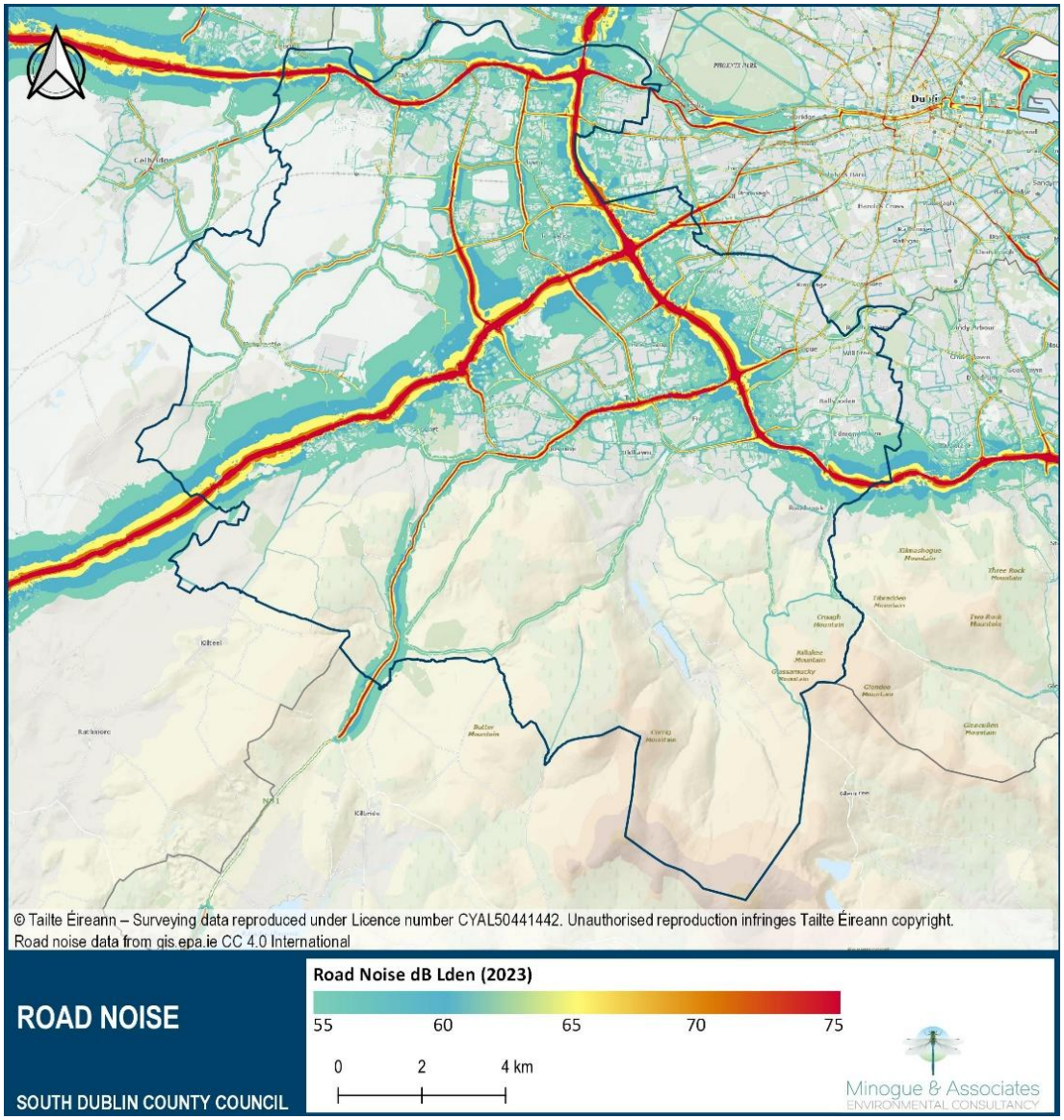
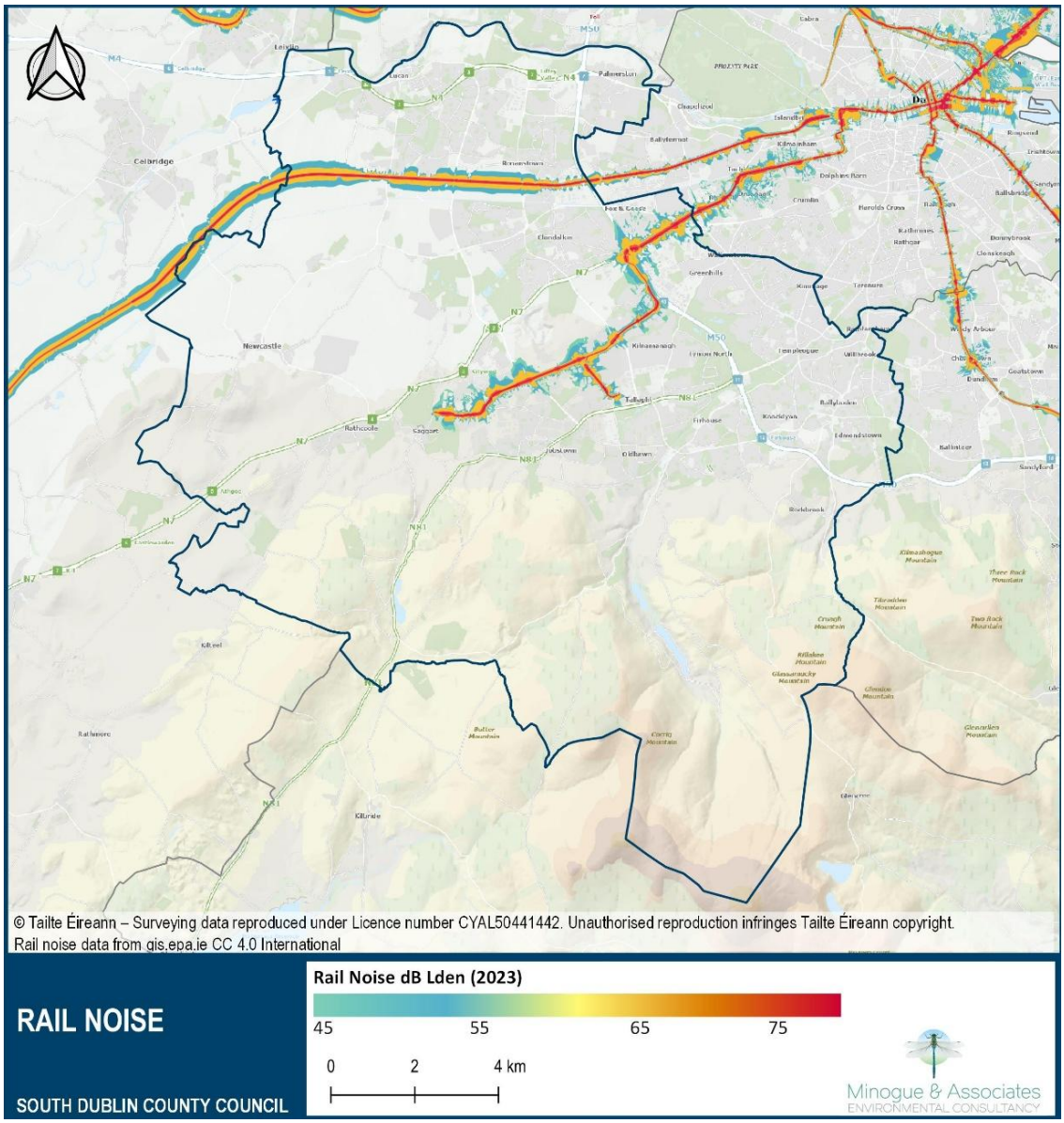


Figure 4-6 Noise mapping for daytime noise from rail



4.3.3 Air quality and human health

The Environmental Protection Agency (EPA) has developed four zones to represent all the potential types of air quality background that are likely to exist in Ireland. These four zones are stated in the Air Quality Regulations (2002) and South Dublin is located with Zone A Dublin Conurbation. The two air quality monitoring stations in South Dublin County are located at Old Bawn Road, Tallaght and Newcastle Road, Lucan.

The main source of NO2 in Ireland is from road transport. Diesel engine vehicles produce more NO2 than petrol vehicles. Other sources of NO2 in Ireland include:

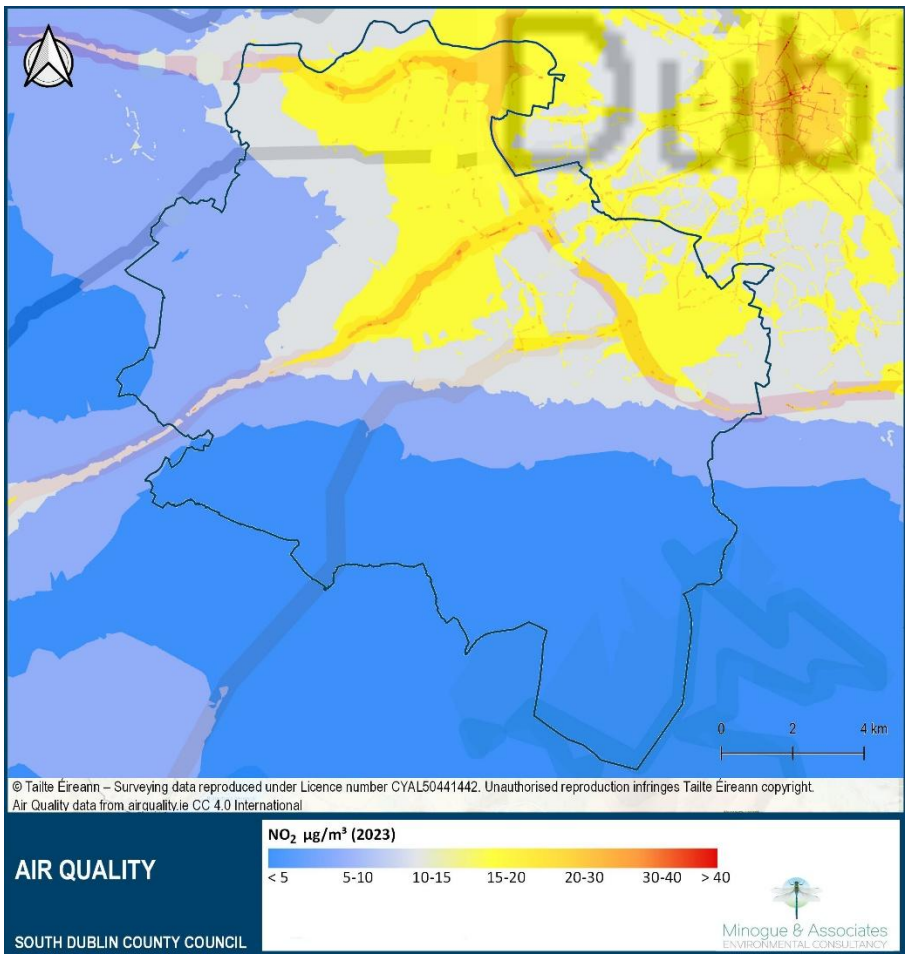
- off-road machinery (for example, earth movers and lawnmowers),
- industrial and construction activities, and
- electricity and heat production equipment such as central heating boilers and generators

$PM_{2.5}$ is also known as 'fine particulate matter'. This is the most important pollutant in Ireland from a health perspective. It is estimated to cause ~1,300 premature deaths in Ireland annually. The main source of fine particulate matter in Ireland is from the burning of solid fuel to heat homes.

More recent research evidence highlighted there was no safe level of air pollutants to cause adverse effects. The persistent efforts to mitigate air pollution, even at relatively lower levels, will continue to yield health benefits for the public[4].

Figure 4.7 below shows measurements of Nitrogen Oxide (NO2), county scale.

Figure 4-7 Nitrogen Oxide measurements at county scale (EPA 2025)



4.4 Climate Change

The South Dublin County Council *Climate Action Plan 2024-2029* sets out three targets that are interdependent:

[4] Chen, J., Mölter, A., Gómez-Barrón, J.P. et al. Evaluating background and local contributions and identifying traffic-related pollutant hotspots: insights from Google Air View mobile monitoring in Dublin, Ireland. Environ Sci Pollut Res 31, 56114–56129 (2024). https://doi.org/10.1007/s11356-024-34903-5

- A 51% reduction in greenhouse gas emissions in line with our National Climate Objective by 2030, while striving for neutrality before 2050 as per South Dublin County's participation in the EU Mission for 100 Climate Neutral and Smart Cities (Net Zero Cities).
- A Climate Resilient City prepared for the known and unknown impacts of climate change
- A Just Transition meaning that the actions we take do not cause harm.

At plan level, contributing to the legally binding net Zero no later than 2050 and a 51% reduction in emissions by end of 2030 included in the Climate Action and Low Carbon Development (Amendment) Act 2021 will mean embedding climate change actions through all land use planning including the Variation

The key responses in the Variation to the challenges posed by climate change in the built environment include:

- The promotion of compact urban growth, making better use of available land.
- The integration of transport orientated development, promoting more walking, cycling and use of public transport.

4.5 Water resources including flooding

The EU Water Framework Directive (WFD) (2000/60/EC) establishes a framework for the protection of both surface and groundwater. Transposing legislation outlines the water protection and water management measures required in Ireland to maintain high status of waters where it exists and to prevent any deterioration in existing water status. The plan area is located within the Liffey and Dublin Bay catchment.

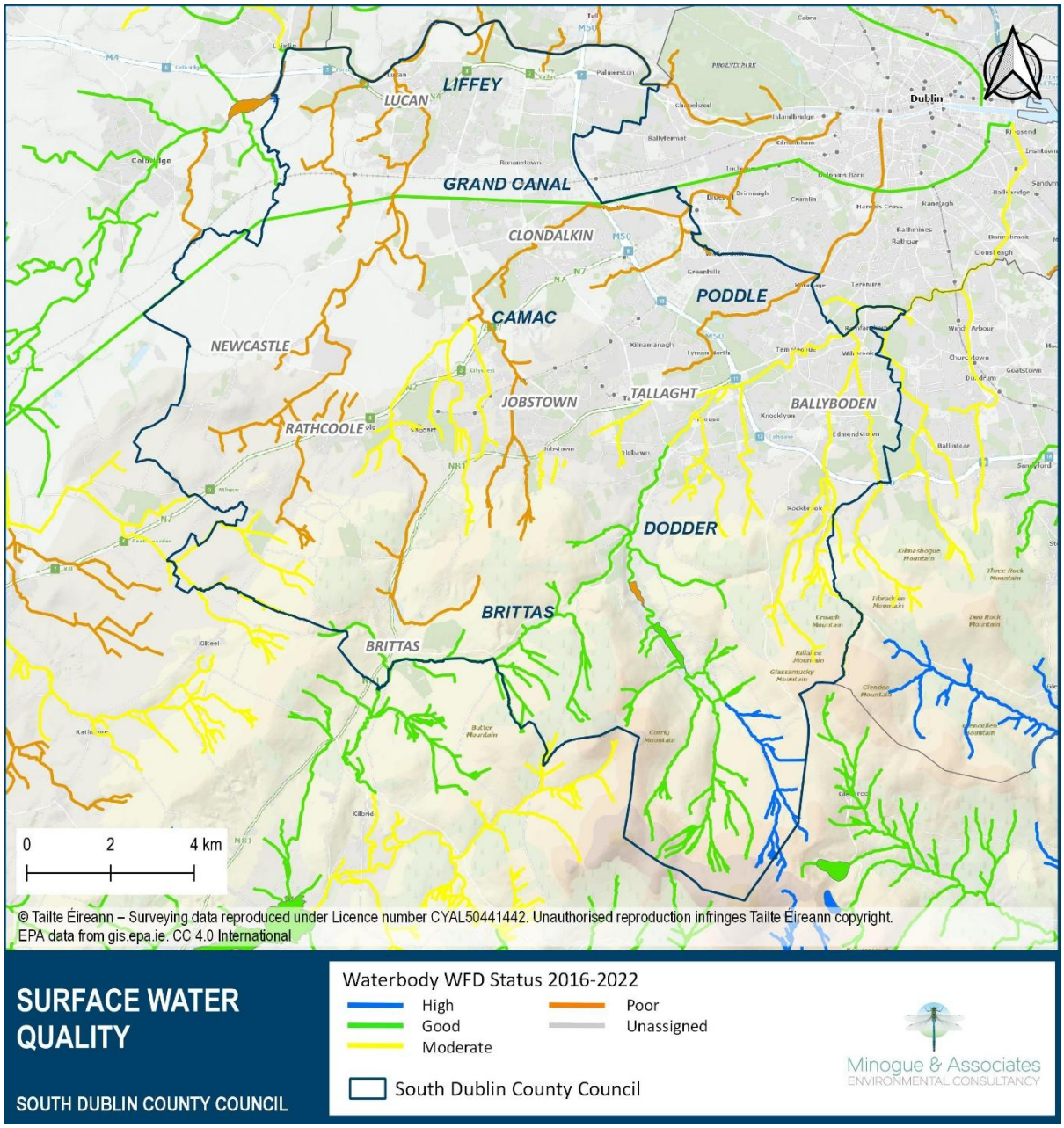
The EU Groundwater Directive (2006/118/EC) uses a holistic approach to groundwater by addressing the relationships between groundwater, surface water and ecological receptors. Groundwater is considered by its ecological status, which is based on two assessments: chemical and quantitative status. Both of these need to be in good condition for the overall water body to be classified as good.

The most recent EPA Water Framework Directive (WFD) dataset for the period 2019–2024 identifies the current status of surface and groundwater bodies within the local area as summarised in Table 4.2 below. Figure 4.8 presents the surface water quality in and around the plan area.

Table 4-2 Current status of surface and groundwater within the local plan area (EPA 2025)

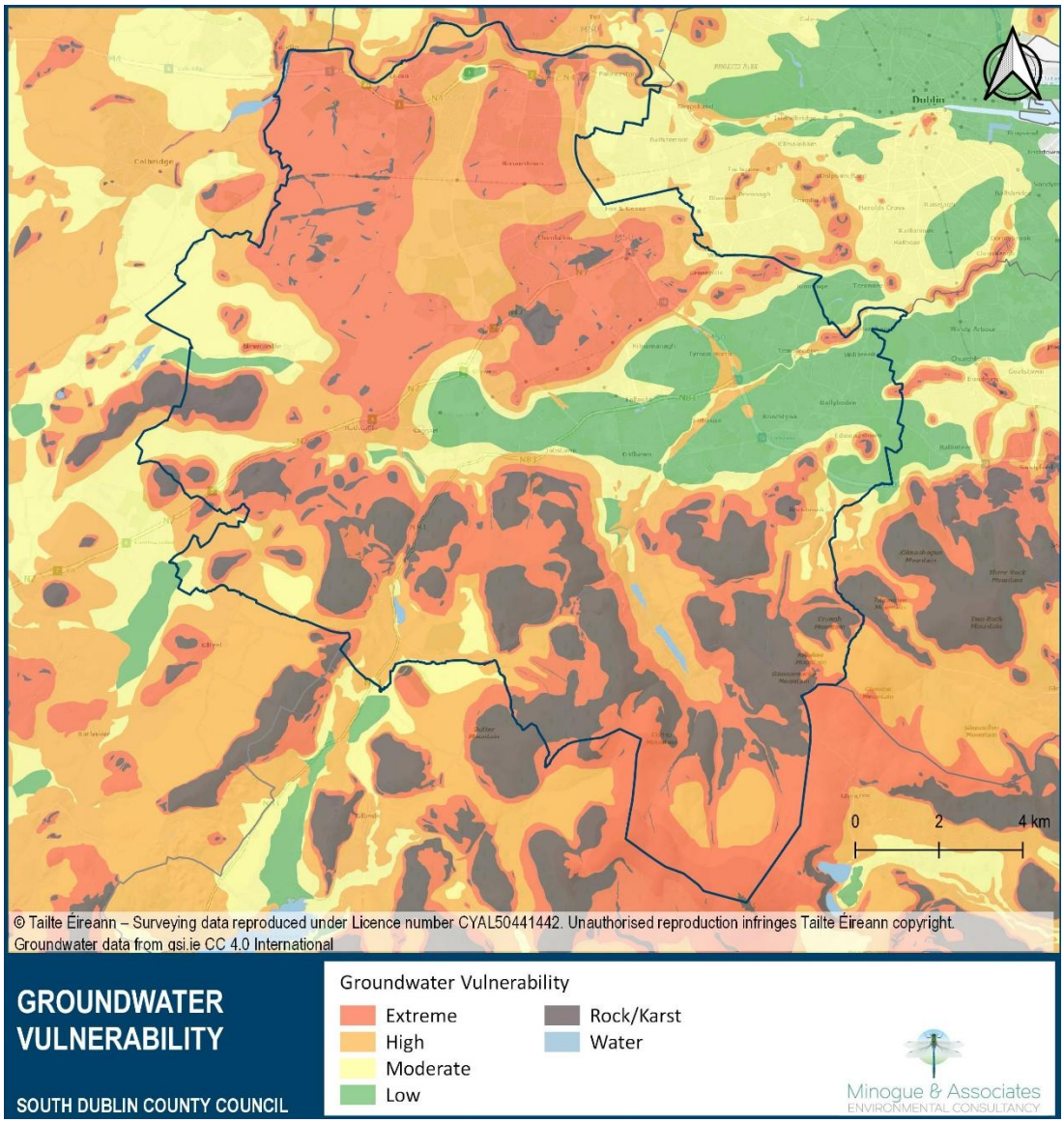
Status Category	River	Lake	Groundwater
High	1		0
Good	10	1	6
Moderate	8	0	0
Poor	8	2	0
Poor (GW)	0	0	1

Figure 4-8: Surface Water Quality in and around Plan Area



The GSI rates groundwaters according to both their productivity and vulnerability to pollution. Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. 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 holes. Groundwater vulnerability varies across the county with low vulnerability in areas around Tallaght, to moderate to high vulnerability in the northern and southern lands of the county, please see Figure 4.9.

Figure 4-9 Groundwater Vulnerability



4.5.1 Flood Risk

Certain areas across the County are at risk of flooding from various sources including groundwater, pluvial, fluvial and estuarial. There are various historic and predictive indicators of flood risk in the County, including along the Camac, Liffey, Dodder Rivers and their tributaries, Lucan Stream, Griffeen River, Corbally Stream, Kingswood Stream, Robinhood Stream, Poddle River, Kilmashogue River and Brittas River

The OPW is the lead agency tasked with the management of flood risk in the Republic of Ireland. In 2022, the OPW reviewed their 2016 Flood Risk Management Plans (FRMP). The purpose of each FRMP is to outline the long-term strategy to manage flood risk in Ireland. A number of settlements were identified by the OPW in 2012 as requiring detailed assessment of flood risk (Areas for Further Assessment).

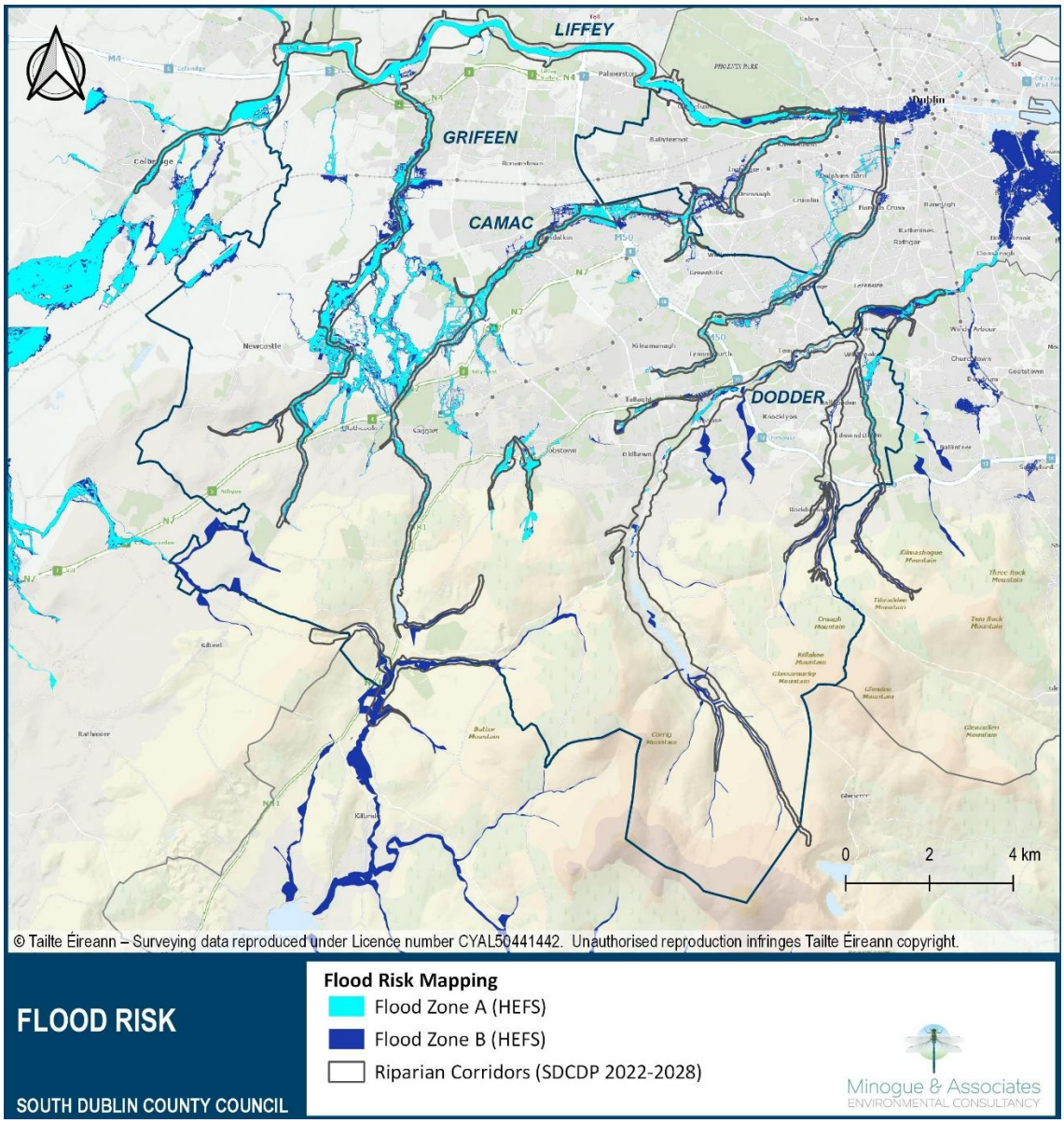
These settlements are Adamstown, Esker South, Finnstown, Hazelhatch, Rathcoole and Saggart.

A Strategic Flood Risk Assessment (SFRA) as required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Circular PL 2/2014 (Department of Environment, Community and Local Government), was undertaken alongside the preparation of the Variation by JBA Ireland. This included a flood risk review of the Land Use Zoning Objectives and lands forming part of the Variation. A number of these sites were identified as requiring a Justification Test. Annex A to this report identifies these sites from the SFRA and further detail is provided in the accompanying SFRA report.

The OPW CFRAM flood zone extents represent the present day probability of flooding. To account for climate change adaptation, the South Dublin CDP 2022-2028 delineates the 'High-End Future Scenario' (HEFS) which provide valuable information to inform zoning decisions, particularly where development is proposed in areas that may be vulnerable under more extreme climate scenarios. These HEFS flood extents have been used as part of the Justification Test appraisal of the Variation lands in the SFRA.

Please see Figure 4.10 below for flood mapping using the High End Future Scenarios and the Riparian corridors mapped by SDCC.

Figure 4-10 Flood mapping (HEFS) and SDCC mapped Riparian Corridors



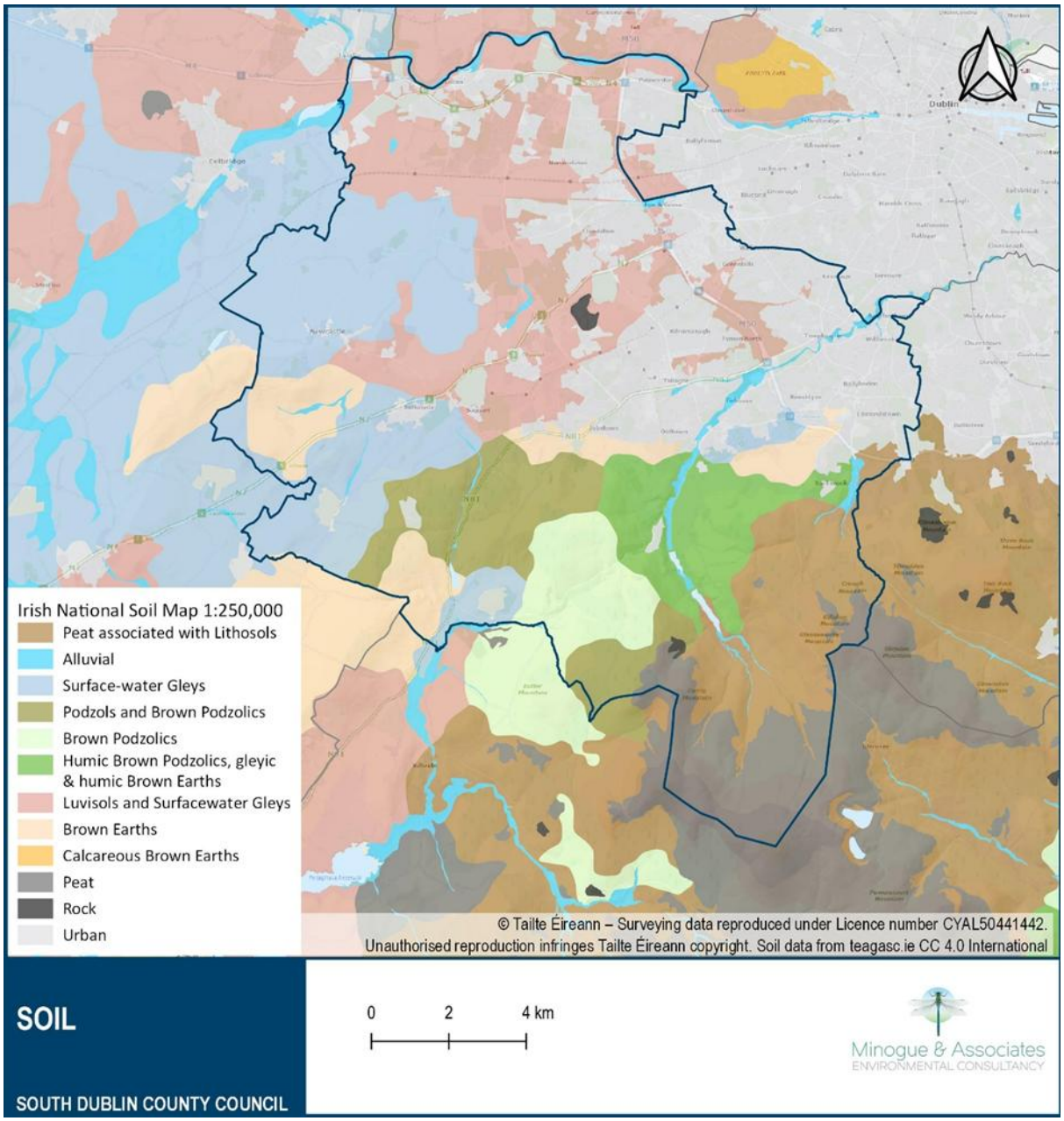
4.6 Soil and Geology

The types of soils found covering the County include the following as shown in Table 4.3 below and presented in Figure 4.11. Within the plan area, built land is identified as 'made soils', these are soils which have been disturbed, transported or manipulated by activity in the urban environment. The multiple functions of healthy soil including ecological, hydrological and carbon storage all contribute to the need for healthy soils.

Table 4-3 Soil Types Covering the County

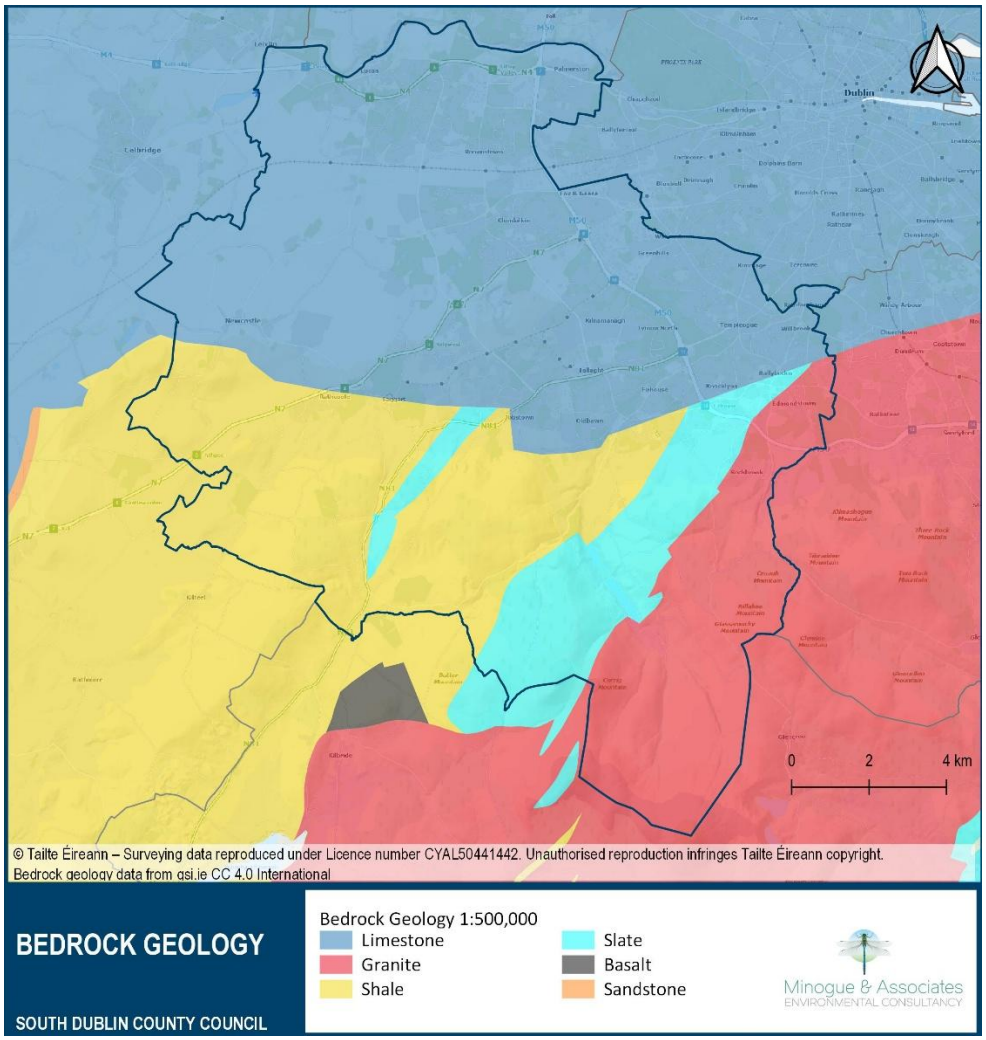
Soil Type	Description
	Dominant Soils
Urban soils	Urban soils are soils which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas. These soils are found mainly in the northern, most built-up parts of the Plan area.
Gleys	Gleys are soils showing the effects of poor drainage and have developed as a result of permanent or intermittent water logging. This may be due to a high-water table, to a 'perched' water table caused by the impervious nature of the soil itself, or to seepage of runoff from slopes. Most gleys have poor physical conditions, resulting in restricted growth in spring and autumn. These soils are mainly in the north and north-western parts of the Plan area.
	Other Soils
Brown Podzolics	Brown podzolic soils are characterized by dark brown humus-mineral soil covered with a thin mat of partly decayed leaves. These are mainly in the south and south-western parts of the Plan area.
Grey-Brown Podzolics	Grey-Brown podzolic soils are characterized by a comparatively thin organic covering and an organic-mineral layer above a greyish brown leached layer. These are mainly in the south-western parts of the Plan area.
Brown Earths	Brown earths are well drained mineral soils, associated with high levels of natural fertility. These are found mainly in the south-eastern parts of the Plan area.
Alluvial soils	These are associated with alluvial (clay, silt or sand) river deposits. These are found in the flood plains of rivers and streams.

Figure 4-11 Soil Classification



The plan area is underlain by limestone bedrock on the lower lands which is well draining. The foothills and mountains in the south of the county comprise more resistant shale and slate with granite bedrock towards the east. See Figure 4.12 below.

Figure 4-12 Bedrock Geology



4.7 Material Assets

Material assets include transport infrastructure, power generation plants and supply networks, water supply, wastewater treatment infrastructure and waste disposal sites among others. As part of the Variation process a planning assessment was undertaken to evaluate potential lands suitable for residential zonings.

The planning assessment is based on the shared goals identified in the NPF and RSES as National Strategic Outcomes and Regional Strategic Outcomes, namely the achievement and delivery of Compact Growth, Accessibility, Sustainable Mobility, Climate Action and a transition to a low carbon climate resilient society.

The purpose of the planning assessment was primarily to identify locations which are considered to be well located / serviced from a sustainable planning perspective and to identify existing constraints and requirements.

The criteria to assess a site's ability to conform to the shared goals of the NPF and RSES included the following:

- Priority growth areas specified in the Metropolitan Area Strategic Plan
- Compact growth and infill development
- Brownfield/greenfield
- Proximity to centres of services and social infrastructure
- Proximity to high-capacity public transport

This has informed the Variation process and the environmental assessments.

4.7.1 Wastewater

South Dublin County's wastewater is currently treated at Ringsend Wastewater Treatment Plant (WwTP). Foul water generated by the operation phase of the plan will eventually be discharged to the sea at Dublin Bay following treatment at the Ringsend WWTP.

A review of the Uisce Éireann wastewater capacity[5] for the county was referenced and is shown below:

Table 4-4 Uisce Éireann Wastewater Treatment Capacity Register (August 2025)

County	Settlement	Wastewater Treatment Plant (WWTP)	Reg #	Indication of Available Capacity
South Dublin	Dublin City and Suburbs	Ringsend WWTP	D0034	Green
South Dublin	Rathcoole	Ringsend WWTP	D0034	Green
South Dublin	Saggart	Ringsend WWTP	D0034	Green
South Dublin	Newcastle	Ringsend WWTP	D0034	Green

The latest Annual Environmental Report (AER) is from 2023[6]. Upgrades to the WWTP have been ongoing in phases. The Annual Environmental Report for Ringsend WWTP (2023) states the following:

- The primary discharge from the wastewater treatment plant does have an observable negative impact on the water quality in the near field of the discharge and in the Liffey and Tolka Estuaries.
- The primary discharge from the WWTP does not have an observable negative impact on the Water Framework Directive status in the Liffey Estuary.

[5] Dublin | Wastewater Treatment Capacity Register | Uisce Éireann (formerly Irish Water)
[6] d0034-01_2023_aer.pdf accessed 3rd December 2025

- Other potential causes of deterioration in water quality relevant to this area are upstream riverine pollutants, combined sewer overflows, exfiltration from sewers and misconnections to surface water sewers in the large urban agglomeration.

Additional information from Uisce Éireann relates to progress in terms of capacity at Ringsend WWTP to meet the Emission Limit Values.

Part 1 Urban Wastewater Treatment Regulations, as amended [7]–

- Compliance. Biological Oxygen Demand (BOD) Compliance: The year-to-date BOD results are in compliance with the UWWTD ELV requirements and are expected to be fully compliant again for 2025*.
- Chemical Oxygen Demand (COD) Compliance: The year-to-date COD results are in compliance with the UWWTD ELV requirements and are expected to be fully compliant again for 2025*.
- Total Nitrogen (TN) Compliance: The assessment of TN compliance is based on an annual mean assessment. Effluent TN varies throughout the year based on temperature effects and Nitrogen load to the plant.
- The Ringsend catchment covers a large area and serves a diverse range of industrial, commercial, and domestic customers. As would be expected in a catchment of this size and scale, the nitrogen load to the plant fluctuates both in response to seasonal factors and the diverse range of connections. Notwithstanding this normal variation, the plant experienced a sustained influent nitrogen peak in 2024 and was above the interim milestone capacity for Nitrogen. Nitrogen is the design limiting factor and Uisce Éireann is continuing to monitor the nitrogen loading to the plant in 2025. As the project approaches the completion milestone there will be improvements in the plant's resilience as key infrastructure comes online. Total Phosphorus (TP) Compliance: The assessment of TP compliance is based on an annual mean assessment. Phosphorus recirculation due to operational challenges on the sludge line is having a negative impact on the TP results. Uisce Éireann has undertaken detailed investigations and corrective measures to address the operational issues identified on the sludge line are being progressed.

Performance of the 400,000 PE capacity upgrade, Block 2 and Block 3 The average load to the plant is calculated on an annual daily average basis. Average load to the plant in 2024 was 2.17 million PE, just above the interim capacity of the plant. It should be noted that overall plant resilience is reduced as it operates over available interim capacity (2.1 million PE) while the planned upgrade works to completion milestone (2.4 million PE) continue.

Given this result and the adequate capacity available at the WWTP to treat additional loads generated by the Project, all wastewater generated by the project will be

[7] bce66a1a-ba03-4137-95d9-c1b9371ec28f.pdf

adequately treated prior to discharge to Dublin Bay and as such it will not have the potential to adversely affect the water quality of the catchment and surrounding coastal waters.
The commencement of the Greater Dublin Drainage Strategy will result in construction of further wastewater treatment at Clonshaugh in Co Fingal that will increase the capacity at Ringsend WWTP further.

4.7.2 Water supply

Currently, the Dublin Region Water Supply Area is defined by the combined areas served by the Dublin Region Water Supply Schemes, operated by the local authorities on behalf of Irish Water, namely:

- Liffey Water Treatment Plant at Ballymore Eustace (South Dublin County Council);
- Liffey Water Treatment Plant at Leixlip (Fingal County Council);
- Vartry Plant at Roundwood (South Dublin County Council);
- Dodder Plant at Ballyboden (South Dublin County Council); and
- Bog of the Ring Groundwater (Fingal County Council).

4.7.3 Waste Management

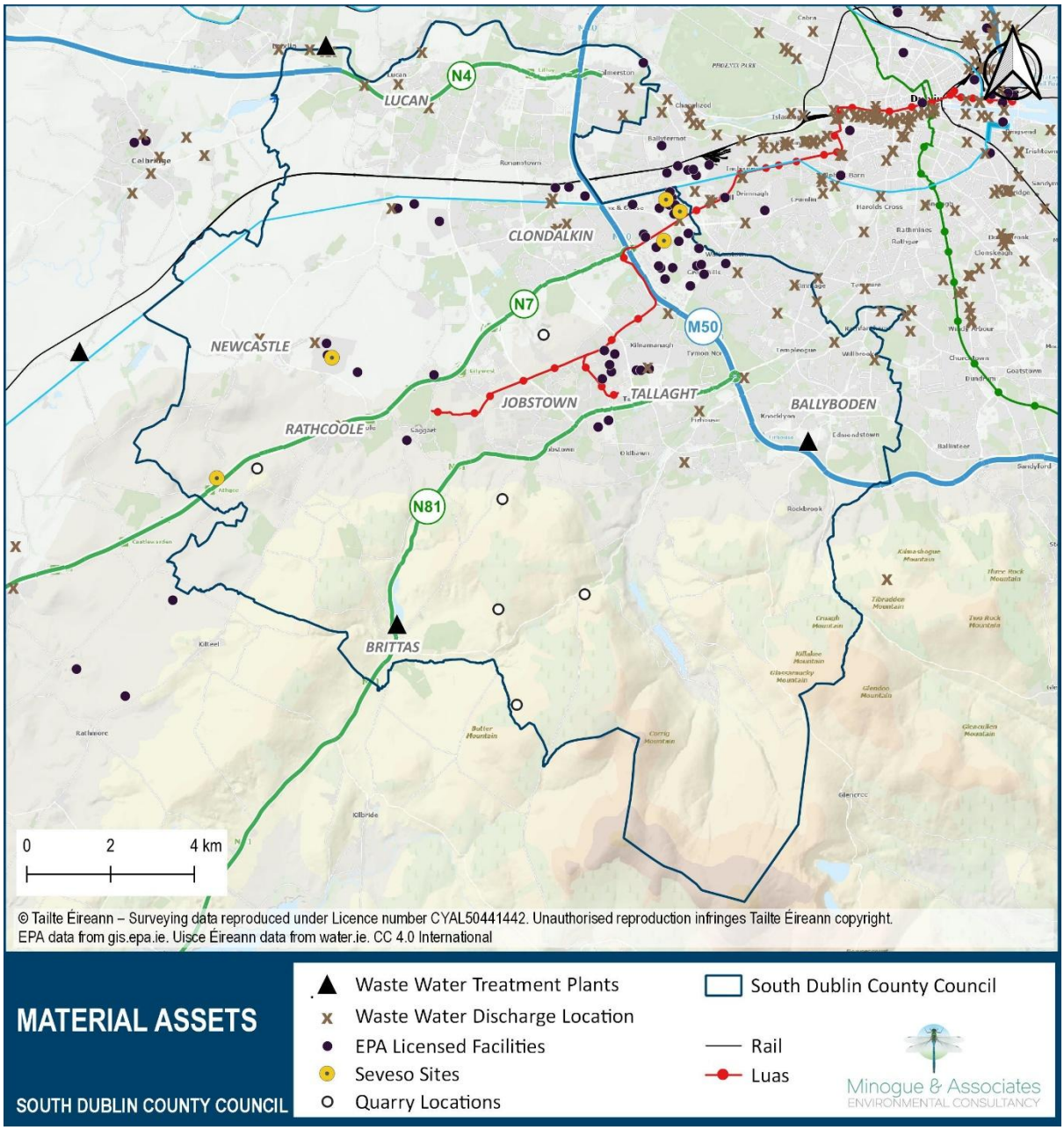
The Waste Management Act 1996 requires Local Authorities to make a waste management plan either individually or collectively for their administrative areas. In 2015, South Dublin was guided by the Eastern Midlands Waste Management Plan 2015-2021 which provided the framework for solid waste management in the region. Post 2021, waste management in Ireland is guided by the first National Waste Management Plan for a Circular Economy, which will replace the existing regional plans. This Plan sets out a framework for the prevention and management of waste in Ireland for the period 2023 to 2029.

4.7.4 Transport

South Dublin is traversed by four major roads networks – the M50, the N7, the N4/M4, the N81 and the R136. The County is served by the Luas Red Line and a number of intercity commuter train services. Further to this, Dublin Bus, TFI and a number of other private operators provide bus service to the County.

See Figure 4.13 for material assets mapping.

Figure 4-13 Significant material assets



4.8 Landscape and townscape

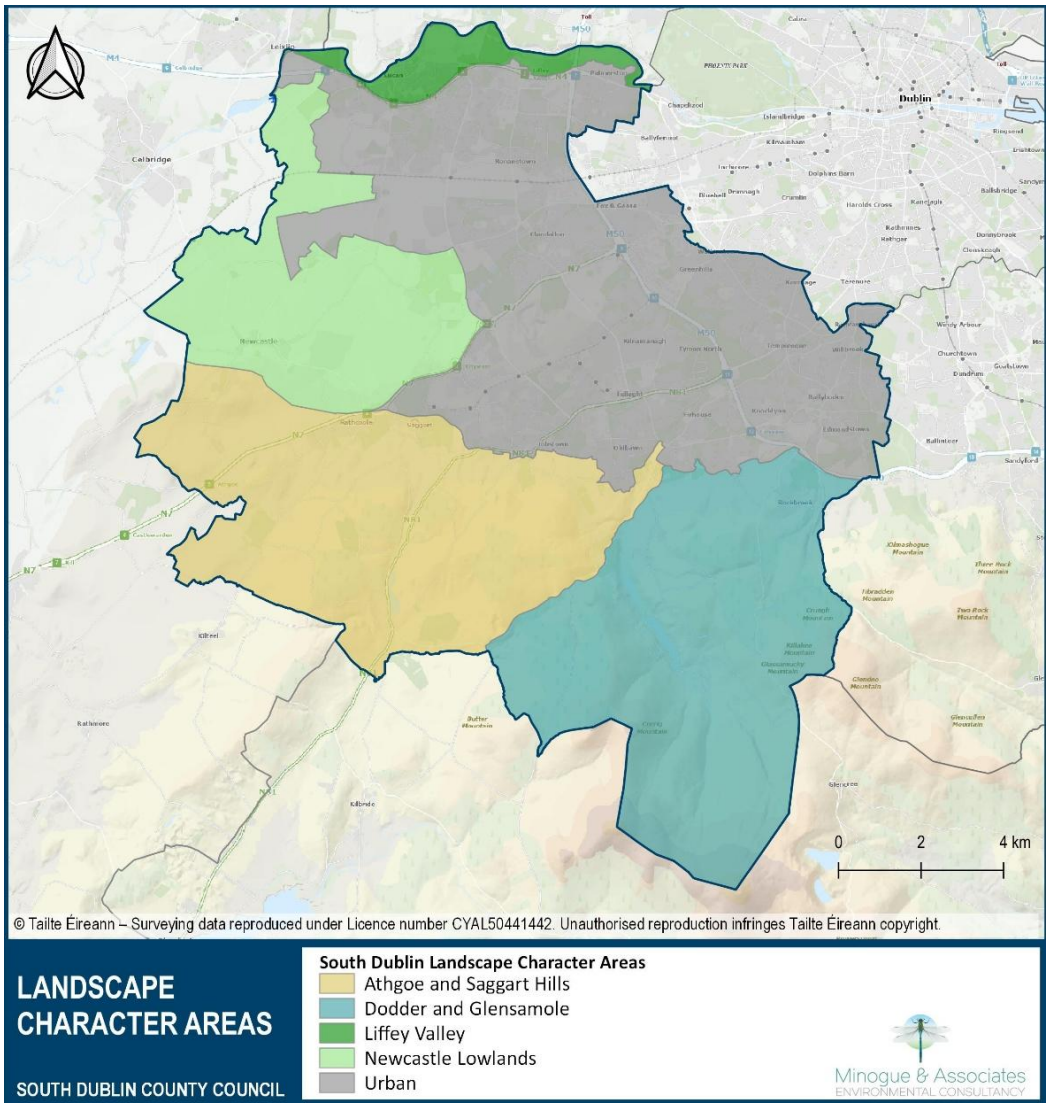
The landscape of the county is varied, ranging from alluvial river valleys to fertile fields, ancient monastic settlement villages surrounded by suburban residential and office parks, to mixed farming and forestry in the mountainous uplands. Significant features of the Plan area include the Dublin mountains offering ecological and biodiversity interest with panoramic views over Dublin Bay and its glacial features of Glenasmole Valley; the Liffey Valley to the north of the county; the historical and tourism amenity of the linear landscape corridor of the Grand Canal; and the urbanised lowlands playing host to much of the county's population. The Liffey Valley Special Amenity Order also encompasses part of the Liffey Valley landscape within the county.

The current Landscape Character Assessment for South Dublin divides the County into 5 Landscape Character Areas, see Figure 4.14. In addition to this, Prospects for Protection have been identified. These comprise of:

Table 4-5Landscape Character Areas and Prospects for Protection

Environmental Features	Description
Landscape Character Areas (LCAs)	• LCA 1 – Liffey Valley • LCA 2 – Newcastle Lowlands • LCA 3 – Athgoe and Saggart Hills • LCA 4 – River Dodder and Glenasmole Valley • LCA 5 – Suburban South Dublin
Prospects for Protection	• Kilakee Mountain • Cruagh Mountain • Sliamh na mBánóg • Ballymorefinn Hill • Knockannavea • Lugmore/Tallaght Hill • Mountpelier Hill • Piperstown Hill • Kippure Mountain • Seefingan Mountain • Corrig Mountain • Seahan Mountain • Glenasmole Valley • Knockannavea Hill • Athgoe Hill • Verschoyle's Hill

Figure 4-14 Landscape Character Areas



4.9 Cultural Heritage

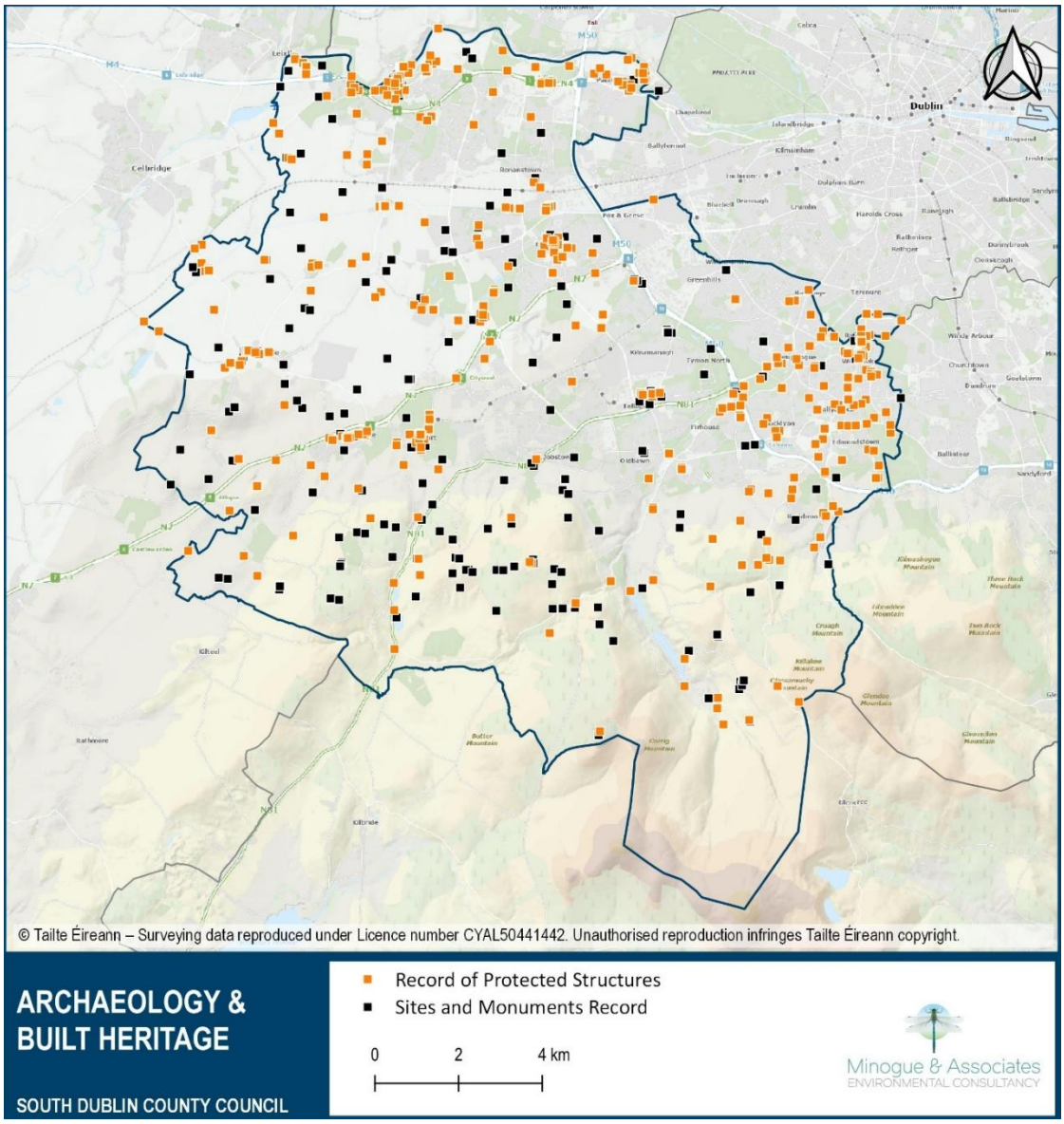
Archaeological sites are legally protected. One of the primary sources of information for known archaeological features is the Record of Monuments and Places (RMP). The RMP is an inventory of sites and areas of archaeological significance. There are 376 Recorded Monuments within the Plan area. Six extensive zones of archaeological potential in the Plan area are located at Tallaght, Newcastle, Clondalkin, Lucan, Saggart and Rathcoole. The most visible examples of archaeological heritage are the street patterns which remain in the monastic settlements of Clondalkin and Tallaght. Other areas of archaeological potential include prehistoric monuments and sites, church sites, burial ground, holy wells and medieval structures. There are 6 recorded monuments on the RMP in State Care in the Plan area.

The architectural heritage of South Dublin is significant and varied; designations such as the Record of Protected Structures (RPS) are compiled by local authority. There are 428 entries to the Record of Protected Structures within the Plan area, which include many

notable buildings in the County such as Rathfarnham Castle, Tully's Castle, St. Finian's Roman Catholic Church and St. Maelruan's Church.

It is acknowledged that the register of protected structures documented in CDPs may not represent all Ministerial recommended sites/structures which are included in the National Inventory of Architectural Heritage (NIAH). The purpose of the NIAH is to identify, record, and evaluate the post-1700 heritage of Ireland and there are over 50,000 listings on the NIAH in Ireland (DAHRRG, 2022). These provisions include historic gardens, designed landscapes and underwater archaeological heritage. See Figure 4.15 below.

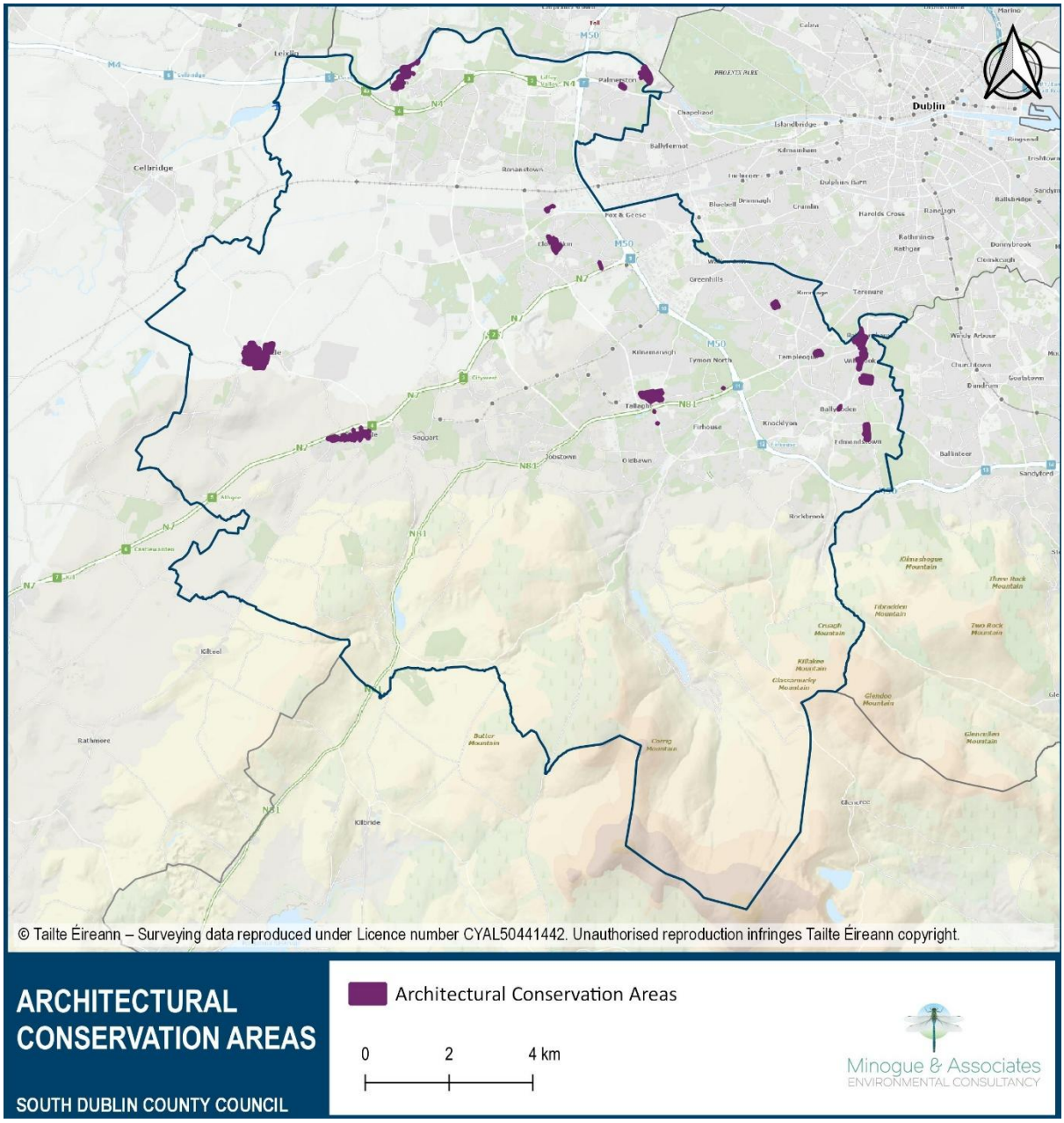
Figure 4-15 Sites and monuments record, record of protected structures



The Department of Housing, Local Government and Heritage has developed Heritage Ireland 2030 plan, published in February 2022, serving the purpose of informing the decision-making process. An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape designated for its special characteristics and distinctive

features. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are various ACAs designated within the Plan area. See Figure 4.16 below.

Figure 4-16 Architectural Conservation Areas



4.10 Key Environmental Issues

The previous iterations of consultation on the Variation, the SEA Scoping report and the assessment of environmental resources identify the following consistent themes. These are presented below:

Table 4-6: Key Environmental Issues per SEA Topic

SEA topic	Key environmental issues
Biodiversity, Flora and Fauna	• Enhance existing natural environment in and around the plan area, • Potential impacts to European and Nationally designated sites • Recreational and development pressure on habitats and landscapes • Strengthen the role of nature-based solutions to climate change. • Minimising soil sealing and sustainable use of soil and water resources. • Managing and controlling alien invasive plant and animal species. • Supporting ecological connectivity and avoiding fragmentation of habitats at county scale. • Retention of key landscape features that provide such connectivity particularly water courses and linear features including hedgerows, treelines and woodland.
Population and Human health	• Housing- social, mix of housing, density- achieving Core Strategy and residential units • Services including childcare, amenity, open space • Noise and air emissions and potential impact on human health • Placemaking and creation of sense of place • Provision of social and community infrastructure and demographic mix • Providing resilient urban space comprising blue and green infrastructure • High quality placemaking • Potential effects on water quality.
Water resources including flooding	• Responding and adapting to increasing extreme weather effects and effects on water resources. • Control/avoid introduction of alien and invasive species • Reversing trends in water quality in the plan area, contributing to improving water quality. • Seeking co benefits via Nature based solutions for surface water run off
Air Quality and Climate	• Reducing transport related GHG emissions via modal shifts to alternative transport options • Implementation of South Dublin Climate Action Plan 2024 via measures at plan level • Addressing impacts of climate change and ensuring where possible mitigation to climate change impacts are designed to provide co benefits via nature based solutions.
Soil and Geology	• Reuse of brownfield sites • Reuse of materials where possible via circular economy approaches to construction • Consideration of historical land use and possible local soil contamination

SEA topic	Key environmental issues
Landscape and townscape	• Public realm measures • Placemaking and creation of sense of place for new residential landuse zonings • Good design and permeability • Enhancement of local landscape character • Erosion of local landscape features (eg vernacular boundaries, hedgerows)
Cultural Heritage	• Protection and enhancement of built heritage • Recognising relationship between natural and cultural heritage • Promotion of heritage features.
Material Assets	• Provision of a permeable pedestrian and cycling network within the plan area which links residential areas, schools, community facilities, green network and public transport facilities. • Environmental protection will be integral, with the avoidance of potential pollution at source and reduction of environmental risks to the receiving environment • Encouraging sustainable use of resources. • Energy efficiency across material assets and infrastructure

4.11 Evolution of the environment in the absence of the Variation

SEA topic	Evolution of same
Biodiversity, Flora and Fauna	Flora and fauna, habitats and ecological connectivity would be protected under existing provisions at legal and policy level. The South Dublin CDP 2022-2028 remains the primary statutory land use framework for the county, specific measures identified to support green and blue infrastructure plus modal shifts with localised improvements in noise and emissions may not be realised; as well as specific measures for longer term actions.
Population, Human health	The Variation responds to the NPF and to achieve Compact Growth, Accessibility, Sustainable Mobility, Climate Action and a transition to a low carbon climate resilient society. In the absence of the Variation the identification of additional lands based on the planning assessment approach would not be achieved. However, the need for additional residential housing lands would remain. This could result in less optimum locations or under capacity for lands zoned residential with accompanying effects on population and human health. In combination, effects relating to human health and air quality, water quality and climate change would not be fully availed of.
Air Quality and Climate	In the absence of the Variation, existing legal and policy commitments will apply however, there would be fewer opportunities at scale to support transport-based actions to address climate change and to embed climate change adaptation measures through the plan area.
Water Resources including flood risk	Statutory and legal provisions would remain through the Water Framework Directive and South Dublin CDP 2022-2028.
Soil and Geology	Legislation relating to soil and geology related activities would apply.

SEA topic	Evolution of same
Material Assets	Existing objectives that relate to this parameter would apply. The current legislation which provides for the protection and enhancement of the water resources and quality at the European, National, Regional and County level will protect and maintain existing water bodies in the Plan area. The planning assessment has highlighted transport led development where optimum and this may not be advanced in such a holistic manner in the absence of the Variation.
Landscape	Existing objectives that relate to this parameter would apply.
Cultural Heritage	Legislation and guidance from international and national level afford both the architectural and archaeological elements a high level of protection. As above for Landscape, the potential for wider benefits around place making and setting of existing cultural heritage features may not be fully realised.

4.12 Inter-relationships

The SEA Directive requires that the interrelationship between the SEA environmental topics must be considered. All SEA topics interact with each other to an extent. However, significant interactions are presented below in Table 4.8 at strategic scale.

Table 4-7: Inter relationships

BFF	•	•	•	•	•	•		•
PHH	•	•	•		•	•	•	•
W	•	•	•	•	•	•		•
G & S	•	•	•		•	•		•
AQ C	•	•	•		•	•	•	•
L	•	•	•		•	•		•
CH	•	•	•		•	•		•
MA	•	•	•	•	•	•	•	•
	BFF	**PHH**	**W**	**G&S**	**AQ C**	**L**	**CH**	**MA**

5 Strategic Environmental Objectives

5.1 Introduction

The purpose of the Strategic Environmental Objectives (SEO) is to ensure that the assessment process is transparent and robust and that the Variation considers and addresses potential environmental effects. These SEOs, set for each of the environmental topics are sourced from the SEA of the South Dublin County Development Plan 2022 - 2028. These objectives are used in Chapter 7 to assess and evaluate the Variation in an evaluation matrix that is presented in detail in Annex A of this report.

Table 5-1: Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028	
Biodiversity (Flora & Fauna) (B)	(B_1) Preserve, protect, maintain and where appropriate, restore the terrestrial, aquatic and soil biodiversity, of international, EU and nationally designated sites, protected species and habitats.
	(B_2) Ensure no adverse effects on the integrity of any European site, regarding its qualifying interests, associated conservation status, structure and function.
	(B_3) Maintain and where appropriate, enhance the biodiversity value of local designated and non-designated ecological and heritage areas, which function as stepping stones for migration, dispersal and genetic exchange of wild species.
	(B_4) Enhance biodiversity in line with the National Biodiversity Strategy and its targets.
Population & Human Health (PHH)	(PHH_1) Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection.
	(PHH_2) Provide high quality residential, community, working and recreational environments with access to sustainable transport options.
	(PHH_3) Ensure that existing population and planned growth is linked with the required infrastructure and the services
	(PHH_4) Protect human health and well-being from environment-related pressures.
Soils & Geology (SG)	(LSG_1) Safeguard sensitive soil, resources and geological heritage sites against pollution and degradation.
	(LSG_2) Promote the sustainable use of infill and brownfield sites over the use of greenfield within the city.
Water Quality (W)	(W_1) Protect and where necessary improve and maintain water quality and the management of watercourses and groundwater and coastal waters in compliance with the requirements of the Water Framework Directive and Marine Strategy Framework Directive objectives and measures.
	(W_2) Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion.
	(W_3) Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals.

Air Quality & Noise (AN)	(AN_1) To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating and industry.
	(AN_2) Minimise travel related emissions and encourage a modal change from car to more sustainable forms of transport.
	(AN_3) Aim to meet Air Quality Directive standards for the protection of human health - Air Quality Directive.
	(AN_4) Significantly decrease noise emissions associated with traffic and transport and other noise related industry etc.
Climate Change (CC)	(CC_1) Minimise contribution to Climate Change by adopting mitigation and adaptation measures.
	(CC_2) Integrate sustainable design solutions into the city's infrastructure (e.g. energy efficient buildings; green infrastructure).
	(CC_3) Contribute towards the reduction of greenhouse gas emissions in line with national targets.
	(CC_4) Encourage and promote development resilient to the effects of climate change.
	(CC_5) Promote the use of renewable energy, energy efficient development and increased use of public transport.
Cultural Heritage (CH)	(CH_1) Protect places, features, buildings and landscapes of cultural, archaeological and / or architectural heritage from impact as a result of development
Landscape & Visual (LV)	(LV_1) Protect and maintain the special qualities of the landscape character of South Dublin County, especially with regard to areas of high amenity - River Liffey, Royal Canal, Grand Canal and coastline.
Material Assets (MA)	(MA_1) Make best use of existing infrastructure, promote the sustainable development of new infrastructure to match population distribution and protect existing assets, to meet the needs of South Dublin County's population.
	(MA_2) Promote the circular economy, reduce waste, and increase energy efficiencies
	(MA_3) Ensure there is adequate sewerage and drainage infrastructure in place to support new development.
	(MA_4) A reduction in energy demand from the transport sector and support moves to electrification of road and rail transport modes.

6 Consideration of alternatives

6.1 Introduction

The development and assessment of alternatives is a legal requirement under the SEA Directive and Regulations. Article 5(1) of the SEA Directive and Schedule 1 of SI 456 of 2025 require that alternatives are considered as follows within the Environmental Report:

- Reasonable alternatives considering the objectives and the geographical scope of the plan or programme;
- The alternatives are identified, described and evaluated;
- An outline of the reasons for selecting the alternatives dealt with;
- A description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how encountered in compiling the required information).

The SEA Statement, which is required at the end of the plan-making and SEA process, must include and summarise "the reasons for choosing the plan as adopted, in the light of other reasonable alternatives dealt with" (12) of the S.I 456 of 2025).

In the preparation, consideration and assessment of alternatives regard has been had throughout the process, to the "Developing and Assessing Alternatives in Strategic Environmental Assessment" – Good Practice Guidance February 2014.

6.2 Preferred Alternative identified for the South Dublin CDP 2022-2028

During the preparation of the primary statutory landuse plan for the County, the South Dublin CDP 2022 -2028, three alternatives were considered and evaluated during the SEA process of that plan preparation[8].

- Alternative 1: Growth focused along Rail Lines: Additional residential growth directed towards existing rail corridors (e.g. Tallaght, Adamstown, Clonburrris) taking account of existing and permitted development and recognition of annual rate of potential delivery over the lifetime of the Plan. Only under-construction / permitted development will be allocated for many existing settlements / neighbourhoods, including Fortunestown (rail capacity at 85-90%), Saggart, Rathcoole and Newcastle.
- Alternative 2: Growth focused on Bus Connects Hubs and Connections: Additional residential growth directed towards Bus Connects hubs and associated connections taking account of existing and permitted development and recognition of annual rate of potential delivery over the lifetime of the Plan. Only under-construction / permitted development will be allocated for some existing settlements / neighbourhoods, including Saggart, Rathcoole and Newcastle.

[8] For full discussion of alternatives considered during preparation of the South Dublin CDP 2022 2028 please see: Chapter 7 of the final SEA ER of the South Dublin CDP 2022-2028. Microsoft Word - 6819_SEA ER_FINAL_20220729

- Alternative 3: Growth focused on Connected Neighbourhoods Additional residential growth directed towards existing and planned areas, taking a balanced account of existing and permitted development and recognition of annual rate of potential delivery over the lifetime of the Plan. The connected neighbourhood concept is underpinned by existing and planned rail and bus infrastructure supported by Active Modes / Cycle South Dublin and Green Infrastructure network.

The preferred strategic alternative identified for the approach to the South Dublin County Development Plan 2022 -2028 was Alternative 3 Growth focused on Connected Neighbourhoods. The reasons provided for choosing this alternative at strategic scale for the South Dublin CDP 2022 -2028 were as follows:

- consistency with the requirements of the NPF and RSES;
- maintains and enhances all existing settlements, within a connected neighbourhood context;
- prioritises growth in Dublin City Area and Suburbs (Metropolitan Area) whilst allowing sustainable compact growth of existing serviced settlements; and
- promotes smarter travel policies, reduction in commuting, with increased walking and cycling.

As the Variation forms part of the South Dublin CDP, it must reflect the strategic approach of Growth Focused Connected Neighbourhoods, whilst still achieving the requirements of the Variation as described in Section 1.2 of this SEA ER. Further detail on the Alternatives evaluated as part of this Variation are presented below.

6.3 Variation: Consideration of alternatives

6.3.1 Background and context

All alternatives must be realistic, reasonable, implementable and viable. The Variation to the South Dublin CDP 2022 -2028 seeks to respond to the recent changes in National planning policy, namely the publication of the National Planning Framework (NPF) First Revision and the publication of Guidelines for Planning Authorities issued under Section 28 of the Planning and Development Act, 2000 (as amended):

- NPF Implementation: Housing Growth Requirements, 2025 ('the 2025 Guidelines'), and
- Sustainable Residential Development and Compact Settlement Guidelines, 2024 ('the Compact Settlement Guidelines').

The Planning and Development Act 2024 (as amended) requires that a development plan shall be materially consistent with the National Planning Framework, regional spatial and economic strategy and any relevant National Planning Policies and Measures.

The selection of suitable lands for zoning/re-zoning to residential uses have followed a criteria-based assessment to ensure the approach is consistent with achievement of the shared goals outlined in the NPF, RSES and CDP in relation to, inter alia, Compact Growth, Accessibility, Sustainable Mobility, Climate Action, transition to a low carbon climate resilient society and proper planning and sustainable development.

The lands identified as preferred as part of the Variation must meet the criteria-based approach where possible, with highest ranking lands advancing to Variation stage. The criteria-based approach to assessment of the lands provided a useful method of assessing and ranking the lands in terms of suitability and in identifying shortfalls that could be addressed in tandem with development, some of which have been included as Specific Local Objectives in the Variation. Generally, the highest scoring lands were the focus of the preparation of the Variation. The capacity of these lands and their individual and cumulative ability to achieve the identified need for additional lands in response to the 2025 Guidelines were also considered.

In some cases, policies of the County Development Plan, potential planning/social gain or site constraints also informed which sites or parts of sites were to be brought forward as part of the Variation.

6.3.2 Earlier Alternatives excluded on grounds of not being reasonable to achieve the objectives and scope of the plan (i.e. the Variation).

A number of alternatives were considered during early iterations of the Variation, and these are presented below. The rationale, reasons for their exclusion are also given.

- Whilst there are lands in the plan area that are Employment and Enterprise (EE) and these could be rezoned to residential; these are not realistic at this juncture to include for zoning as a more comprehensive analysis of EE land needs and capacity will need to be carried out as part of the preparation for the next County Development Plan. Widescale rezoning in advance of this would be premature.

- Tallaght Town Centre LAP and City Edge (plan preparation in progress) lands are existing Strategic Long-Term Development Areas which are forecast to be developable over a long timeframe from the present time up to and beyond 2040. Their regeneration and delivery of residential and more intensive mixed-use development is expected to be gradual, aligned with phased delivery, resolution of existing constraints and investment in infrastructure and public amenities needed to reflect the evolving nature of these areas. As part of the settlement capacity audit which established the need for additional residential lands, housing delivery in these areas has been forecast from the present time up to and beyond 2040 and therefore has been considered already, consequently this is not a realistic alternative.

- A related alternative under consideration was to rezone additional lands for Employment and Enterprises uses elsewhere in the County to facilitate quicker regeneration in these areas by accommodating the relocation of existing low employment extensive land-uses. This was not considered to be realistic as such alternative lands would need to be readily available and serviced or would require investment in infrastructure, which in itself would require a long lead-in time.

- Finally, lands on the lower hills of the County were identified through submissions for consideration for rezoning. With one exception, these did not meet the criteria-based approach, in terms of transport orientated development, and other infrastructural requirements in addition to representing significant environmental and cultural resources at plan level. Therefore, the lands on the hills of South Dublin County were not considered realistic or practical alternatives. Generally, the focus for lands was on the Dublin City and Suburbs settlement, in accordance with national, regional and local planning policy. While lands were identified through submissions for consideration for rezoning in the settlements of Rathcoole, Newcastle and Saggart, these lands generally did not score well and were not brought forward, except at specific locations that provided the potential for significant planning/social gain or where lands scored highly in the assessment and were contiguous to the Dublin City and Suburbs boundary.

6.3.3 Consideration of Alternatives Workshop

A Consideration of alternatives workshop was held with the SEA Consultants, and SDCC team members from Forward Planning, Heritage, Environment, Climate Action and JBA Ireland consultants undertaking the Strategic Flood Risk assessment on 25th November 2025. The following alternatives were explored during this workshop and are commented upon below in Table 6.1 overleaf. The symbols used, at strategic scale to identify potential effects from each alternative against the Strategic Environmental Objectives presented in Chapter 5 is presented below in Box 6.1.

Box 6-1 Symbols used in the SEA evaluation

No likely interaction with /insignificant impact with SEOs	O	Potential conflict with SEOs – likely to be mitigated	⇳
Likely to improve status of SEOs	↑	Uncertain interactions with SEOs	?
Probable conflict with SEOs – unlikely to be mitigated	↓		

Table 6-1 Assessment of Alternative Scenarios: South Dublin County Development Plan SEOs

Alternatives Considered at Variation Scale	↑	↓	⇕	0	?
Alternative 1: Sequential development across all settlements: all existing settlements including settlements in more rural areas would be identified for additional residential land rezoning, on a sequential basis, where lands are, or could be, serviced.		PHH2 PHH3 SG2 AN2 AN4 MA1 MA4	PH1 B1 to B4 PH4 SG1 W1 W2 W3 AN1 CC1 to CC5 CH1 LV1 MA2 to MA4		
SEA comment: At strategic level, this alternative presents a number of potential conflicts with the SEOs, principally around PHH, Air and Noise and material assets. This is due to a proposed sequential expansion across all settlements may result in excessive urban sprawl due to lands not being prioritised for transport orientated development. This could generate additional private transport activity over medium to long term. This is due to not all settlements being supported by good public transport links, and in the absence of same, adverse, medium to long terms effects could arise from this pattern. *This alternative would impact adversely on transport emissions at county level, that currently account for approximately 30% of the emissions of South Dublin. Associated with this would be local impacts at settlement lands associated with increased noise and air quality emissions. Whilst the existing public transport options could be used where present, reducing the need for private transport, this alternative would not support a more broad, holistic modal shift that increases non-vehicular means for all activities such as transport to school, shops and home. The potential for cumulative erosion of landscape and wildlife corridors associated with this alternative, might be addressed through existing mitigation but would require constant oversight and monitoring.* *Finally, this alternative is not consistent with a number of the Material Assets SEOs, in addition to the transport issues, the alternative does not represent an efficient use of services such as water supply, wastewater etc.*					
Alternative 2: Brownfield and underutilised lands within the built-up footprint of Dublin City and suburbs.	SG2 MA2-4		PHH1 – PHH4 SG1 B1-3 W1-3 AN1-2 CC1- CC5 W1 -W3 CH1 LV1		
SEA comment: This scenario prioritises lands within the built-up footprint of Dublin City and Suburbs as the main focus for the residential rezoning proposals. This would include brownfield, institutional, infill lands and spaces which are underutilised or not widely publicly accessible, such as space associated with recreation such as golf courses. Whilst this alternative results in loss of green space at county scale, some of these lands under this approach are well located in terms of services, infrastructure, and public transport. There is an option to refine this alternative to allow for significant planning/social gain that can be developed through Specific Local Objectives such as requiring that lands adjacent provide for public use, biodiversity and wildlife.					

Alternatives Considered at Variation Scale	↑	↓	↕	**0**	?
The provision of Specific local objectives can assist in addressing loss of green space under this approach. This would facilitate consistency with a number of SEOS around PHH, BFF, W and MA in particular over the short to longer term. *A blanket exclusion of lands, some of which are well located in terms of services, infrastructure and public transport would contribute to loss or conversion of other greenfield lands at county scale; some of which may be more significant in overall environmental quality and could give rise to cumulative loss of features at county scale including non-designated habitats or locally important features of cultural and environmental heritage (non-designated). Some of these lands may also be the most readily deliverable, requiring lower additional investment in infrastructure and services. Therefore, the local loss of greenspace is identified as an issue. However, mitigation at site level can be applied. Therefore, this alternative is a means to meet the objectives of the NPF, encouraging compact growth, whilst avoiding the lands of highest overall environmental sensitivity and facilitating transport-oriented development.*					
Alternative 3: Focus on large-scale Transport Orientated Development only at existing or planned high-capacity public transport rail and light-rail nodes as planned.	PHH1-2 AN1 to AN4 CC5 MA4		PHH 2-3 BFF1-4 W1 to W3 SG 1-3 CC1-CC4 CH1 LV1 MA 1 -MA3		
SEA comment: This alternative performs well in terms of greater alignment with national policy. The focus around transport hubs encourages public transport use and integrated landuse and transport development. This alternative performs well in terms of aligning large-scale transport orientated development with existing built-up lands. Consequently, at strategic scale, this alternative is consistent with a number of SEOs including MA and CC with indirect positive and direct positive interactions with PHH SEOS. This alternative can contribute to improved local air quality, and reduced noise emissions associated with reduced transport emissions. The alternative however could at this strategic scale result in extensive new residential zoning around transport hubs such as Hazelhatch close to the Grand Canal and Adamstown South -such lands are largely rural and in agricultural use. The loss of green space may also prevent implementation of nature-based solutions to climate change and effective surface water management due to conversion of lands to mostly built land and artificial surfaces. Areas of green and blue primary and secondary corridors are also present around the lands south of the Grand Canal including the Grand Canal Corridor primary corridor and Adamstown Link and Griffeen River link, secondary GI corridors. *Given this alternative does perform strongly in terms of transport orientated development and provide positive interactions with the above-named SEOs, this alternative is broadly positive at strategic scale but requires further refinement.*					

6.4 Preferred alternative

Based on the above evaluation, and given the statutory, hierarchal, and infrastructural capacity considerations, the preferred option is a combination of Alternative 2 and Alternative 3. By combining these two alternatives, the principle of transport orientated development and where possible a focus on brownfield and underutilised lands within Dublin City and suburbs, at strategic scale this combined alternative performs best with the SEOs.

At strategic scale this combined alternative meets the objectives of the statutory provisions, and performs the strongest environmentally, subject to further refinement via lands proposed for rezoning and appropriate mitigation measures, including where relevant, site-specific measures. Thus, the planning authority has had regard to the potential alternatives as explored above, and this preferred alternative at strategic scale is being advanced and seeks to avoid and minimise adverse effects on environmental resources.

7 Significant Environmental Effects

7.1 Introduction

The purpose of this section of the Environmental Report is to predict and evaluate as far as possible the environmental effects of implementing the Variation. Having established the environmental baseline and the key environmental sensitivities for the plan area in Chapter 4, and the Strategic Environmental Objectives in Chapter 5, an assessment for any potential environmental effects from implementing the Variation can be undertaken.

7.1.1 Approach to the assessment

Two elements of assessment have been undertaken which include:

1. An assessment of Variation- this is provided in Annex A of this report, and a summary of key potential significant effects is discussed in Section 7.2 below.
2. An assessment of cumulative and in-combination effects (Section 7.3).

The assessment process has been undertaken using matrix assessments which reflect ratings in relation to potential significant effects on the environment as a result of implementation. The matrix assessment ratings used are as follows:

- Profound: An impact which obliterates sensitive characteristics.
- Moderate: An impact that alters the character of the environment in a manner that is consistent with existing and emerging trends.
- Slight: An impact which causes noticeable changes in the character of the environment without affecting its sensitivities.
- Imperceptible: An impact capable of measurement but without noticeable consequences. Thirdly the potential duration of identifiable impacts is discussed. The following terms are used:
- Short: Impact lasting one to seven years.
- Medium: Impact lasting seven to fifteen years.
- Long term: Impact lasting fifteen to sixty years.
- Permanent: Impact lasting over sixty years.
- Temporary Impact lasting for one years or less

7.2 SEA evaluation of the Variation

The South Dublin CDP 2022-2028 sits underneath the Regional, National and International spatial planning framework. The South Dublin CDP influences plans at a lower level of plan hierarchy, including Local Area Plans and other area-specific plans such as Local Biodiversity Action Plan, Local Heritage Plan, Local Climate Action etc. The South Dublin CDP was subject to Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA).

At strategic scale the Variation responds to the recent changes in National planning policy, namely the publication of the National Planning Framework (NPF) First Revision and the publication of Guidelines for Planning Authorities issued under Section 28 of the Planning and Development Act, 2000 (as amended). A robust methodology has informed the identification of preferred short/medium-term and long-term lands for residential landuse zoning. As such the Variation is consistent with national planning policy and at project level, any proposals on such lands will be subject to the statutory planning and consenting process, including, application of the existing environmental protection measures in the South Dublin CDP 2022-2028.

The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Variation are detailed as are residual effects, taking into account mitigation through both provisions integrated into the Variation and existing environmental protection provisions in the South Dublin CDP 2022 -2028.

However, as Annex A demonstrates, the additional rezoning of lands could give rise to environmental effects in the absence of mitigation; both at site level in some locations, and more broadly at cumulative scale. Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. These effects could include short term construction effects and longer-term operational effects. Whilst most effects could be mitigated by integrating measures relating to environmental protection and management into the Variation and by adhering to such provisions from the existing South Dublin CDP 2022 -2028.

7.2.1 Population and human health

Land use planning impacts on the everyday lives of people and can either hinder or help promote healthy sustainable environments and communities. For example, the provision of safe walking routes, cycleways, parks, playgrounds, safe routes to school, public transport facilities, etc. result in direct and indirect health benefits and allow for healthier transportation choices to be made by communities above private motor car. The methodology applied in identifying lands for proposed rezoning has been informed by such considerations under the settlement and infrastructure capacity studies.

The maintenance, protection and enhancement of water quality are important and are closely allied to human health generally. For some of the lands proposed for rezoning, buffer zones at rivers and riparian corridors will be required to ensure water quality protection, with co-benefits for soil and geology SEOs, and biodiversity SEOS. The South

Dublin CDP 2022-2028 has identified riparian corridors on maps and has an associated policy on same (See Chapter 8 of this SEA ER). Retention or additional appropriate planting may also be required for several lands close to major roads to provide appropriate site level screening and filtration of noise, air and light emissions.

7.2.2 Biodiversity, Flora and Fauna

A review of the aerial imagery for all the lands has classified at high level the habitats present on site. This was supported by polygon protected species searches from the National Biodiversity Centre Database.

- Following from the above, whilst several lands may be considered brownfield, the reuse and conversion to residential lands is positive for soil and geology SEOs and reduces greenfield conversion.
- Aligned with this is the identification of the presence of hedgerows and treelines on several preferred lands, some are present on the 1st Edition Ordnance Survey map which reflects their ecological and historical significance. Mitigation measures are recommended for such lands and can be seen in Annex A. (loss of these features represents a permanent impact)
- Soil sealing without provision of nature-based solutions and SuDs, as well as robust ecological buffers will be required for the greenfield lands, and current South Dublin CDP policies exist in this regard
- Cumulatively the erosion or fragmentation of ecological corridors will require mitigation and retention of such features at project level. Infrastructure has the potential to generate adverse impacts on biodiversity, with key potential impacts relating to disturbance, disruption, fragmentation and loss of habitats. This, and the provision of supporting facilities such as sports pitches with flood lighting could, in the absence of mitigation, give rise to adverse effects. (impacts can range from medium to long term)
- Likewise, conversion of agricultural lands that may be used by mobile species at different times of the year requires mitigation. Survey results from winter bird surveys and commissioned studies of habitats and protected species should be included and integrated into baseline studies.
- Indirect and cumulative impacts are identified for biodiversity in the event of damage to soil and water resources associated with development activities. Water pollution or surface water run off could give rise to negative effects on water quality and streams/ rivers within the lands with subsequent adverse effects on biodiversity (short to medium term impacts).

7.2.3 Climate Change

Overall, the Variation will contribute positively to climate change adaptation and mitigation through the following:

- Integration of land use and transport as reflected in the methodology

- Integration of plan actions and measures in the South Dublin Climate Action Plan 2024 -2029
- Focus on public transport as a key criterion should encourage modal shifts if delivered successfully and reliably.
- New housing will be energy efficient
- Soil sealing associated with conversion of grassland to built land represents a local loss of carbon sinks and a long term impact. Measures to integrate additional buffers of natural vegetation, good quality landscape plans and SuDs assist at strategic scale to address such impacts.

7.2.4 Water Resources including flooding

Potential effects on water resources (and frequently biodiversity) in the absence of mitigation include:

- A reduction in water quality in groundwater, springs and watercourses associated with the construction phase of new developments (short to medium term impacts)
- Surface water runoff from impermeable surfaces leading to reduced water quality in groundwater springs or surface waters affecting qualifying habitats and species downstream (impacts can range from short to long term).
- Changes in the flow rate of watercourses arising from an increased footprint of impermeable surfaces within the Plan area - increasing the extent of impermeable surfaces will result in a decrease in infiltration and an increase in runoff
- Inadequate wastewater treatment resulting in pollution of groundwater springs or surface watercourses;
- Generally, land use practices can result in water quality impacts and whilst surface water impacts may be identified quickly, impacts to groundwater can take much longer to ascertain due to the slow recharge rate of this water resource;
- Interruptions in hydrological regimes, particularly in wetlands that can have direct impacts on biodiversity, and
- Water quality impacts can also have human health impacts in the case where bacterial or chemical contamination arises.
- While High End Future Scenario (HEFS) extents are not used to delineate Flood Zones, they provide valuable information to inform zoning decisions, particularly where development is proposed in areas that may be vulnerable under more extreme climate scenarios. Therefore, the HEFS flood extents have been used as part of the Justification Test appraisal of the opportunity sites undertaken in Appendix A of the SFRA that accompanies the Variation.
- Riparian corridors are identified and mapped in the South Dublin CDP 2022-2028 with associated policy these will provide for appropriate protection and co benefits for relevant lands.

7.2.5 Soil and Geology

Soil quality and function may be enhanced through measures associated with water quality and land use and achieving the Water Framework Directive Objectives. The

quality of groundwater is directly related to soil quality and land use, and abstraction of geological and soil resources can also affect the water table over time.

The most significant potential soil and geology effect identified relates to new build development on greenfield lands representing a permanent loss of soil. Soil sealing and increased risk of surface run off are addressed largely by identification of brownfield lands, SUDs measures, and reuse of existing brownfield lands also creates positive effects for Geology and Soil SEOs.

7.2.6 Material Assets

For transport, lands proposed for rezoning perform well in terms of the infrastructural audit generally and this will create positive impacts for a number of SEOs including population and human health, air quality and climate and sustainable transport. More sustainable transport options with cumulative and in combination positive impacts relating to human health, biodiversity and air quality are identified.

Currently as stated in Section 4.7.1 wastewater is treated at Ringsend WWTP. Water supply and wastewater capacity and demands are addressed in conjunction with Uisce Éireann. The key element in relation to this is ensuring the implementation of the residential lands are in line with capacity to treat wastewater and water supply services.

Additionally, provision is made in the South Dublin CDP 2022 -2028 for surface water measures which contribute to overall surface water management, contribution to green and blue infrastructure and climate adaptation.

Application of Flood Risk guidelines is consistent with SEOS and avoids potential adverse effects arising from in appropriate development and land use activities. Additional information is provided in terms of the review of the lands use zonings of the Variation in the accompanying SFRA and Annex A of this report.

7.2.7 Landscape

Recognition and protection of landscape and habitat features including linear features such as hedgerows, treelines and rivers are detailed in the County LCA and Green Infrastructure chapter of the South Dublin CDP; full adherence and implementation of these policies should minimise loss of local character.

With greenfield lands, the erosion of local features or unsympathetic boundary design, landscape treatments and layout reaffirm the need to ensure quality public realm and place making, policies of which are in the above CDP.

Interactions with other environmental parameters including water, biodiversity and cultural heritage could result in positive or adverse impacts on landscape character at landscape scale.

7.2.8 Cultural heritage

Potential cultural heritage impacts arise in relation to built development, though existing development management control and policies/objectives of the South Dublin CDP will ensure sufficient protection and oversight.

The erosion or loss of vernacular features such as farm gates or local walls would result in permanent loss of such features and the physical representation of local craftwork and history.

7.3 Cumulative and in combination effects

Cumulative effects can be described as the addition of many small impacts to create one larger, more significant impact. As the Variation will sit within the South Dublin County Development Plan 2022 -2028, the potential for cumulative impacts between the variation and the South Dublin County Development Plan 2022 -2028 does not arise.

Other higher-level plans and in particular proposed transport projects such as the Dart +SouthWest have also been considered for potential cumulative impacts. These are discussed below in Table 7-1.

Table 7-1: Plans and Projects Considered for In Combination and Cumulative Effects

Plan/Project	Overview	SEA comment
National Planning Framework First Revision	National Planning Framework - Project Ireland 2040 is the government's long-term overarching strategy to make Ireland a better country for all of its people. Alongside the development of physical infrastructure, Project Ireland 2040 supports business and communities across all of Ireland in realising their potential. The National Development Plan and the National Planning Framework combine to form Project Ireland 2040. Development of infrastructure may have localised adverse impacts. Actions that may arise as a result of Project Ireland 2040 will be considered at a project level, which will ensure that any cumulative or in- combination impacts are addressed. Due to the high-level nature of this Plan, it is not possible to determine with confidence the likely impacts or mitigation measures required yet in detail.	This plan was subject to full SEA and AA, and given its high strategic level, strategic mitigation measures are included; at this strategic scale, no cumulative or in combination effects are identified. Moreover, the First Revision to the NPF has guided and informed this Variation

Plan/Project	Overview	SEA comment
River Basin Management Plan for Ireland 2024	Ireland's third River Basin Management Plan 2024 Key actions in the Plan include tighter controls on the use of fertilisers that impact water quality, a greater focus on compliance and enforcement with over 60 new staff at local level, and a target or 4,500 farm inspections per year. In addition, continued investment in wastewater infrastructure will see Uisce Éireann investing a multi-billion Euro budget over the period 2025-2029 to reduce impacts on water quality, a new national River Barriers Mitigation Programme will ramp up efforts to remove river-blocks that impact on species like salmon and lamprey swimming upstream to spawn, and a review of arterial drainage requirements and the underpinning Arterial Drainage Act will be undertaken in the context of land use.	The third cycle is subject to full SEA and AA and is not identified as giving rise to in combination or cumulative effects.
Eastern and Midland Regional Economic and Spatial Strategy	The RSES provides a long-term, strategic development framework for the future physical, economic and social development of the Eastern and Midland Region. The Strategy provides the following: • Spatial Strategy – to manage future growth and ensure the creation of healthy and attractive places to live and work • Dublin Metropolitan Area Strategic Plan (MASP) – to ensure continued competitiveness of Dublin and a supply of strategic development for sustainable growth • Economic Strategy – that builds on our strengths to create a strong economy and jobs, that ensures a good living standard and economic opportunity for all • Climate Action Strategy – to accelerate action and ensure a clean and healthy environment, sustainable transport and green infrastructure. • Investment Framework – to prioritise the delivery of infrastructure and enabling services by government and state agencies	This plan was subject to full SEA and AA, and subject to all mitigation measures identified in same being applied and implement, no cumulative or in combination effects are identified.
Catchment-based Flood Risk Assessment and Management (CFRAM) and Flood Risk Management Plans	These studies are required by The Floods Directive [2007/60/EC], which is being implemented in Ireland through the European Communities (Assessment and Management of Flood Risks) Regulations 2010 [S.I.122/2010]. Each FRMP is accompanied by an associated SEA Environmental Report and Natura Impact Statement.	The SEA and AA processes carried out during the preparation of the FRMP have ensured that the potential significant environmental impacts associated with implementation of the FRMP have been identified and that these impacts have been given

Plan/Project	Overview	SEA comment
		appropriate consideration.
Greater Dublin Drainage Project	GDD represents the next major step in the development of wastewater infrastructure for Dublin and the surrounding counties. In July 2025, An Coimisiún Pleanála granted planning permission for this critical project. Once operational, the GDD Project will have the capacity to provide wastewater treatment for the equivalent of half a million people living and working in this area. GDD is a key part of Uisce Éireann's investment in new wastewater infrastructure in Greater Dublin. The GDD Project will: • safeguard public health; • improve and protect the environment; • support the delivery of housing in North Dublin and parts of Kildare and Meath; • facilitate employment, social progress & economic growth in the wider Dublin region. As part of the Greater Dublin Drainage project, a new WWTP will be built at Clonshaugh that comprises a regional treatment plant, sludge hub center, and an orbital sewer system to manage wastewater for 500,000 people across the region. This will release capacity at the Ringsend WWTP.	The Natura Impact Statement prepared for the Greater Dublin Drainage Project concludes that with the implementation of the mitigation measures the project will not result in direct, indirect or cumulative impacts which would have the potential to adversely affect the qualifying interests/special conservation interests of the Natura 2000 sites within the study area.
National 4th Biodiversity Action Plan 2023-2030	The National Biodiversity Action Plan 2023-2030 builds upon the achievements of the previous Plan. It will continue to implement actions within the framework of five strategic objectives, while addressing new and emerging issues: • Objective 1 - Adopt a Whole of Government, Whole of Society Approach to Biodiversity • Objective 2 - Meet Urgent Conservation and Restoration Needs • Objective 3 - Secure Nature's Contribution to People • Objective 4 - Enhance the Evidence Base for Action on Biodiversity • Objective 5 - Strengthen Ireland's Contribution to International Biodiversity Initiatives The Wildlife (Amendment) Act 2023 introduced a new public sector duty on biodiversity. The legislation	The objectives of the plan to enhance biodiversity and the 2025 guidance for public bodies should be implemented in the Variation monitoring to facilitate positive cumulative impacts.

Plan/Project	Overview	SEA comment
	provides that every public body, as listed in the Act, is obliged to have regard to the objectives and targets in the National Biodiversity Action Plan	
Transport Strategy for the Greater Dublin Area 2022- 2042	It sets out how transport will be developed across the region, covering Dublin, Meath, Wicklow and Kildare, over the period of the strategy and has been approved by the Minister for Transport in accordance with the relevant legislation.	This plan was subject to full SEA and AA, and subject to all mitigation measures identified in same being applied and implement, no cumulative or in combination effects are identified.
South Dublin Climate Change Action Plan 2024 -2029	The South Dublin Climate Action Plan 2024-2029 - sets out the actions that South Dublin County Council is taking	The strategy has been through a Strategic Environmental Assessment and Appropriate Assessment. Subject to all mitigation measures identified in same being applied and implement, no cumulative or in combination effects are identified.
BusConnects	All 12 Core Bus Connects infrastructure projects have received planning permission from Coimisiún Pleanála (ACP). These include Lucan to City Centre, Liffey Valley to City Centre and Tallaght/Clondalkin to City Centre core bus schemes	Planning consented.
DART+ South West and DART +West	The DART+ South West project aims to increase train capacity to 23 trains per hour, and passenger capacity from 5,000 to 20,000. The DART +West benefits to extend DART network to Maynooth in Co Kildare will provide more indirect benefits to South Dublin. The new services will utilize electrical power, reducing the carbon footprint compared to the current diesel trains.	An Bord Pleanála have approved the Railway Order application to extend the electrified DART network from Hazelhatch & Celbridge to Heuston Station and the South city via Phoenix Park Tunnel. The Railway Order for DART+ South West was lodged in March 2023 and approved November 2024.

Plan/Project	Overview	SEA comment
Dublin City Development Plan 2022 - 2028. Dún Laoghaire Rathdown County Development Plan 2022 - 2028. Kildare County Development Plan 2022 - 2028. Fingal County Development Plan 2023 - 2029	The County or City Development Plan (CDP) provides the primary planning strategy document for the development of a local authority area over the statutory time period of the plan.	Each of the CDPs with Zone of Influence of South Dublin has been subject to SEA and AA processes to ensure that the potential significant environmental impacts associated with implementation of the Plan have been identified and that these impacts have been given appropriate consideration. Subject to all mitigation measures identified in same being applied and implement, no cumulative or in combination effects are identified.
Of the above transport-related projects, BusConnects, Dart+ South West, and Dart+ West have received planning approval, with works commenced on BusConnects. These projects have been subject to full EIA and AA and relate predominantly to existing built land and artificial surfaces. The need to meet 2040 climate targets and decarbonise the transport system in and around the plan area in addition to the consenting process for these projects, does not result in adverse cumulative impacts at strategic scale.		

7.3.1 Consideration of intra plan elements and cumulative impacts.

7.3.1.1 Cumulative impacts at sub catchment scale associated with Variation No 2.

At the public consultation stage, submissions raised concerns about potential cumulative impacts arising from the Variation. As the preceding section 7.2 shows, reference is made to the potential for cumulative impacts across the Variation and across SEA topics. In addition, the lands identified for rezoning by SDCC were subject to preliminary site selection via a criteria-based approach as outlined in the Variation. Therefore, at strategic, county scale, these lands have been evaluated and identified as meeting requirements such as serviced land and proximity to services. As the Variation progressed, and some sites were removed or new sites included, specific mitigation measures as appropriate and relevant were identified through the SEA, AA and SFRA processes. These are in addition to the existing environmental protection measures of the South Dublin CDP 2022 -2028 that will apply should planning applications arise on the Variation lands. Chapter 8 of this SEA presents the existing South Dublin CDP 2022 -2028 measures plus additional site-specific measures in the final Variation in Table 8. 2.

Finally, in response to the submissions about cumulative impacts, this final SEA ER provides more commentary on the potential for such effects associated with the lands zoned residential as part of the Variation process. It provides an overview and

commentary on the lands based on a sub-catchment basis. This is considered an appropriate scale for the county level of the Variation. Consideration of surface water associated with construction and operational phases of residential development is a key inter- relationship across all SEA topics. Furthermore, it assumes that all lands within each sub-catchment will be developed and converted to residential land use over the lifetime of the Variation. Clearly, other factors may impact the uptake and delivery of these lands over the lifetime of the Variation, so this commentary provides a worst-case assessment. This additional commentary complements the assessment already provided in Section 7.2 above relating to water resources generally and the Water Framework Directive.

Figure 7-1 Final lands rezoned under Variation No 2 within the Dodder Sub catchment (SC 010)

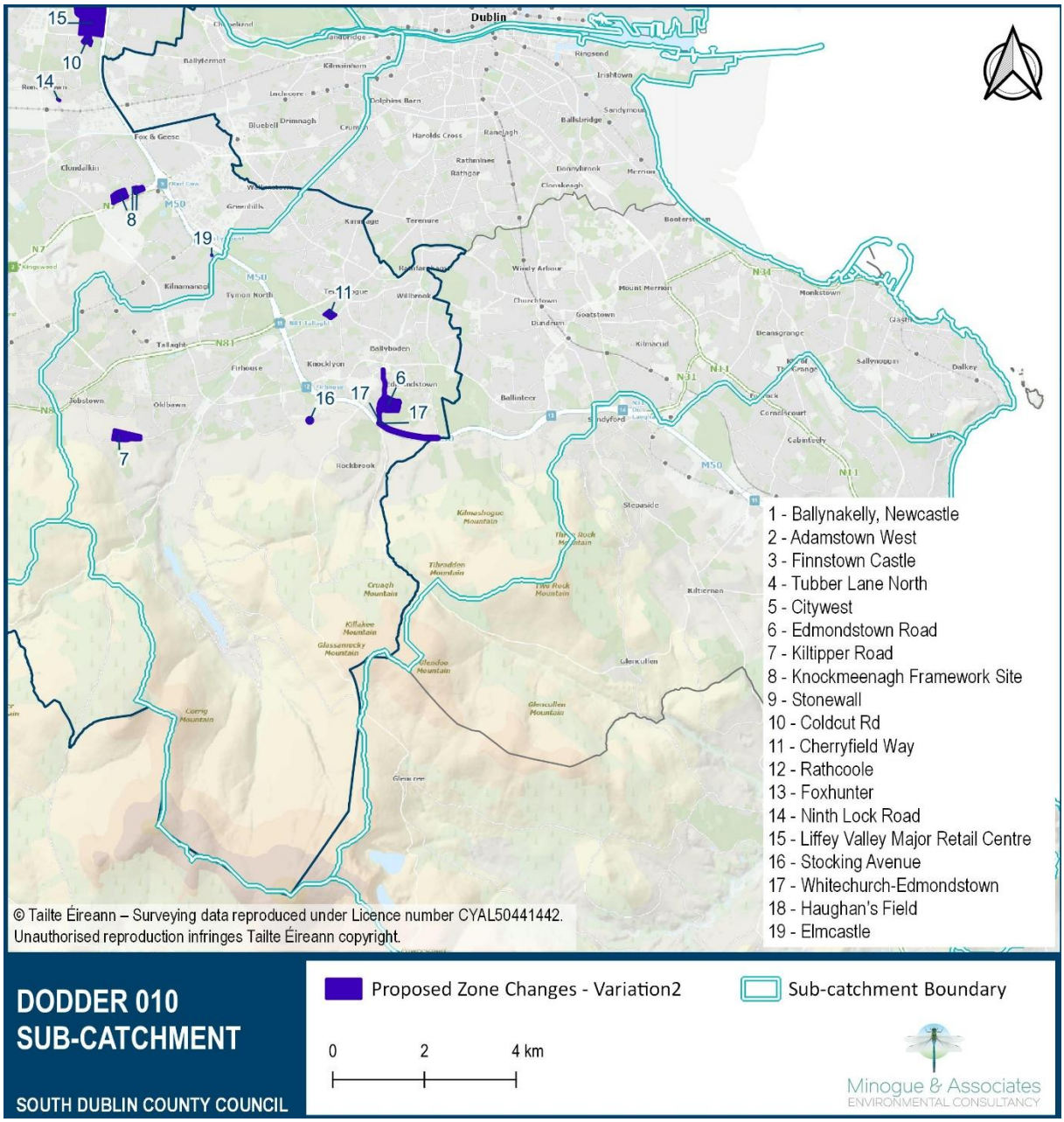
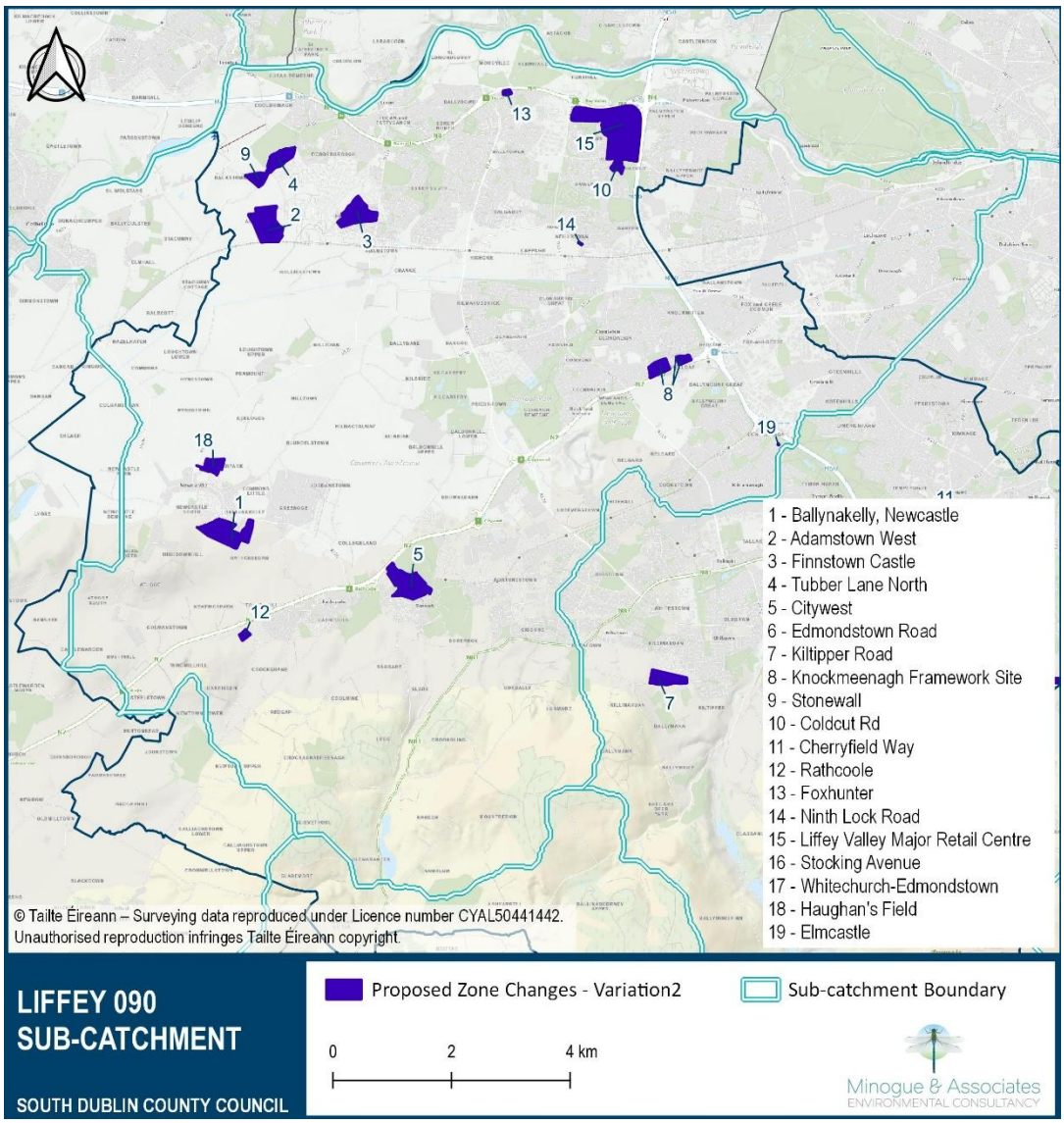


Figure 7-2 Final lands rezoned under Variation No 2 within the Liffey Sub catchment (SC 090)



The Liffey Sub Catchment 090 under the Water Framework Directive (WFD) covers an area of 13,652.007 hectares. Within this sub-catchment, the Variation has rezoned a total of 193.629 hectares to residential land use, amounting to approximately 1.41% of the total sub-catchment area. Similarly, the Dodder sub-catchment 010 as defined under the WFD, covers an area of 16,770.678 Hectares. Within this sub-catchment, the Variation has rezoned a total of 49.123 hectares, amounting to approximately 0.29% of the total sub catchment area. On a quantitative, sub catchment basis, the full build-out of these lands to residential landuse, would therefore result in the conversion of a small proportion of the sub-catchment to residential use, and this modest level of change is the first consideration in assessing the potential for the Variation to contribute to cumulative environmental effects.

However, other considerations beyond the amount of land rezoned at catchment scale includes how potential cumulative effects could arise in terms of the location of the rezoned lands relative to sensitive receptors such as watercourses and designated sites, the pathways connecting them, and the degree to which existing environmental measures of the South Dublin CDP are implemented. Accordingly, this assessment considers not only the extent of land-use change but also the effectiveness of the mitigation measures that will inform the planning and consenting process.

The calculations above assume full build-out without mitigation. In practice, development within the sub-catchment will be subject to the mitigation measures embedded in the South Dublin County Development Plan, including its surface water management and SuDS requirements, such as:

- Policy GI3 (Sustainable Water Management) requires the protection and enhancement of the natural, historical, amenity and biodiversity value of the County's watercourses; their long-term management as significant elements of the County's and Region's Green Infrastructure Network; the accommodation of flood waters during extreme events; and the enhancement of biodiversity and amenity through riparian corridors and appropriate development restrictions within those corridors.
- Policy GI4 (Sustainable Urban Drainage Systems) requires the provision of SuDS throughout the County and the maximisation of their amenity and biodiversity value.

These plan-level measures function as source controls on surface water runoff and as pathway controls on the delivery of pollutants and sediment to receiving waters, and they apply cumulatively across all development within the sub-catchment, including development under the Variation. In addition, site-specific mitigation identified at project stage (such as the retention of existing hedgerows, riparian zones and other ecological features where appropriate) will further reduce residual effects at the local level.

Taking account of the small proportion of the sub catchment affected, the binding nature of the Development Plan's surface water and SuDS requirements, and the requirement for project-level assessment (including EIA and AA screening as applicable) for individual developments, the Variation is not considered likely to give rise to significant cumulative or in-combination environmental effects within the Liffey Sub Catchment 090 or Dodder Sub-Catchment 010, either alone or in combination with other plans and projects.

8 Mitigation measures

8.1 Introduction

This chapter outlines the mitigation measures that will prevent, reduce, and offset as much as possible any significant adverse effects on the environment of the plan area resulting from the implementation of the variation. Section (g) of Schedule 1 of the SEA Regulations requires 'The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the Plan'.

Mitigation involves ameliorating significant negative effects. Where the environmental assessment identifies significant adverse effects, consideration is given in the first instance to preventing such impacts or where this is not possible, to lessening or offsetting those effects. Mitigation measures can be generally divided into those that:

- Avoid effects;
- Reduce the magnitude or extent, probability and/or severity of effect;
- Repair effects after they have occurred, and
- Compensate for effects, by balancing out negative impacts with positive ones.

The iterative process of the plan preparation has facilitated the integration of environmental considerations into the plan. In addition, potential positive effects of implementing the plan have been and will be maximised, and potential adverse effects have been and will be avoided, reduced or offset.

Many impacts will be more adequately identified and mitigated at project and EIA level. In general terms, all development proposals will be required to have due regard to environmental considerations outlined in this Environmental Report and associated assessments, including the Screening for Appropriate Assessment/Natura Impact Report. For the longer-term strategic lands identified as part of the Variation they will be subject to additional SEA process in the longer term.

The Variation must align with and sit within the South Dublin County Development Plan 2022 - 2028 in terms of planning hierarchy applicable to the County. As such all mitigatory policies and objectives identified in the South Dublin County Development Plan 2022 -2028 during the SEA and AA process of same, will provide the same safeguards to ensure the impacts arising from the implementation of the Variation will apply. Table 8.1 below, sets out the suite of mitigation measures to ensure the variation does not give rise to significant environmental effects.

Proposals for development which are deemed contrary to the environmental objectives contained in the South Dublin County Development Plan 2022 -2028 will

not normally be permitted, and if permitted, not without the appropriate site and development-specific mitigation measures.

Table 8.1 presents mitigation measures identified for the Variation through the SEA and AA process and relates to the Specific Local Objectives for lands identified for the Variation. Table 8.2 presents the mitigation measures in the Final Variation. Such mitigation measures reflect the issues identified in the SEA and AA assessments and are presented in blue font.

Table 8-1 SEA and AA Mitigation integrated to the Variation, February 2026

CS7 SLO2: Development on RES-N zoned lands at St. Edmundsbury, Lucan Road shall comply with the following: 1. The development of a park within the Liffey Valley (zoning objective HA-LV) with enhanced recreational amenity and accessibility of the area while protecting the valley's biodiversity and enhancing the green infrastructure network shall be provided for in tandem with, or prior to, residential development of the adjoining Res-N zoned lands. The park shall include lands within the HA-LV zoning objective to the north and west of the Res-N zoned lands extending to the River Liffey, including to the north and west of St. Patrick's Hospital grounds, and including connections westwards to Lucan Village and Chapel Hill. A detailed proposal to achieve this shall be agreed with the planning authority in advance of submission of a planning application for residential development on the Res-N zoned lands. 2. A masterplan for the lands shall be prepared by the planning authority or in consultation with, and approved by, the planning authority, in advance of the submission of a planning application for residential development informed by and addressing, inter alia: a. An Ecological Impact Assessment to ascertain usage of the site and surrounding lands by mobile species, b. Retention and enhancement of the east-west hedgerow and tree line in the north of the site as recorded on 1st Edition OS maps, c. A Local landscape and historical character assessment, d. Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact, and e. A Design Statement outlining how the proposal responds to the setting and special interest of the Protected Structures and their curtilage.
CS7 SLO3: Development on RES zoned lands at Finnstown Castle shall comply with the following: 1. Development may not commence until Dart+ Southwest has commenced construction. 2. An infrastructure masterplan shall be submitted to the planning authority as part of a planning application for residential development, addressing the water and wastewater network upgrades as necessary to serve the subject lands while demonstrating that the needs of zoned lands in the surrounding area, including Clonburris SDZ, are not compromised. To be agreed with Uisce Éireann in advance of submission of a planning application. 3. Through appropriate studies or otherwise and having regard to the cumulative development potential around and including the subject lands, planning applications for residential development on the subject lands shall be informed by and address, inter alia: a. Retention and enhancement of the hedgerow and tree line on the north-western boundary of the site as recorded on 1st Edition OS maps, b. A Social Infrastructure Audit and provision within development proposals to address any needs identified, c. A Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its

impact,
d. A Design Statement outlining how the proposal responds to the setting and special interest of the Protected Structure and its curtilage,
e. A Public Open Space Audit to inform proposals for public open space and recreational facilities, and
f. Provision for direct active travel connections from the subject lands into Adamstown SDZ.

CS7 SLO4:

Development on RES-N zoned lands to the west of Adamstown SDZ shall comply with the following:

1. Development may not commence until Dart+ Southwest has commenced construction.
2. An infrastructure masterplan shall be submitted to the planning authority as part of a planning application for residential development, addressing the water and wastewater network upgrades as necessary to serve the subject lands while demonstrating that the needs of zoned lands in the surrounding area, including Clonburris SDZ, are not compromised. To be agreed with Uisce Éireann in advance of submission of a planning application.
3. A masterplan for the lands, integrated with the existing parameters of the Adamstown SDZ Planning Scheme, shall be prepared by the planning authority or in consultation with, and approved by, the planning authority in advance of the submission of a planning application for residential development on the subject lands. Having regard to the cumulative development potential around and including the subject lands, the masterplan shall be informed by and address, inter alia:
    a. Retention and enhancement of the east-west hedgerow in the northern part of the site as recorded on 1st Edition OS maps, unless required for wider movement needs,
    b. A Social Infrastructure Audit and provision within development proposals to address any needs identified,
    c. A Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact,
    d. A Public Open Space Audit to inform proposals for public open space and recreational facilities, and
    e. Provision for future infrastructure and access connections to lands to the south and west, including reservation for a future vehicular bridge over the railway line, unless determined otherwise in writing by the planning authority.

CS7 SLO5:

Development on RES-N zoned lands north of Tubber Lane shall comply with the following:

1. Development may not commence until Dart+ Southwest has commenced construction.
2. Development may not commence until Tobermaclugg Park, a phasing requirement of the Adamstown SDZ Planning Scheme, has commenced construction.
3. An infrastructure masterplan shall be submitted to the planning authority as part of a planning application for residential development, addressing the water and wastewater network upgrades as necessary to serve the subject lands while demonstrating that the needs of zoned lands in the surrounding area, including Clonburris SDZ, are not compromised. To be agreed with Uisce Éireann in advance of submission of a planning application.
4. A masterplan for the lands, integrated with the existing parameters of the Adamstown SDZ Planning Scheme, shall be prepared

by the planning authority or in consultation with, and approved by, the planning authority in advance of the submission of a planning application for residential development on the subject lands. Having regard to the cumulative development potential around and including the subject lands, the masterplan shall be informed by and address, inter alia:

a. Retention and enhancement of the north-south hedgerow as recorded on 1st Edition OS maps, unless required for wider movement needs,
b. Ensure compliance with G13 (Riparian Corridors) in relation to any watercourses on site,
c. A Social Infrastructure Audit and provision within development proposals to address any needs identified,
d. A Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact, and
e. A Public Open Space Audit to inform proposals for public open space and recreational facilities.

CS7 SLO6:

Development on RES zoned lands on Edmondstown Road shall comply with the following:

a. A local centre to serve the day-to-day needs of surrounding residents shall be provided unless otherwise agreed in writing by the planning authority.
b. A Design Statement shall be prepared as part of a planning application for the subject lands outlining how the proposal responds to the setting and special interest of the Protected Structure and its curtilage.
c. Retention and enhancement of the existing hedgerows as recorded on 1st Edition OS mapping insofar as possible within development proposals.

CS7 SLO8:

Development on RES zoned lands between Elder Heath and Kiltipper Road shall comply with the following:

1. A Transport and Traffic Assessment shall be carried out and submitted to the planning authority as part of a planning application for residential development on the subject lands, addressing access to and from the subject lands, measures to alleviate the impact of the proposed development on the surrounding road network, proposals to upgrade Kiltipper Road where necessary and active travel links from the subject lands to the surrounding area, and
2. Existing hedgerows shall be retained insofar as possible within development proposals and the north-south hedgerow representing the townland boundary of Oldbawn-Killinarden shall be protected.

CS8 SLO2:

Development on RES-N zoned lands on the former golf course of the Citywest Hotel shall be in accordance with a masterplan for the lands to be prepared by the planning authority or in consultation with, and approved by, the planning authority, in advance of the submission of a planning application for residential development informed by and addressing, inter alia:

1. An Ecological Impact Assessment to ascertain usage of the site and surrounding lands by mobile species,
2. Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact, and
3. Provision for a direct active travel link through the subject lands between Mill Road and Garter Lane.

Table 8-2 Final Mitigation Measures in the adopted Variation No 2. Blue font indicates mitigation measures from SEA, AA or SFRA

Policy CS2A: Future Strategic Long-Term Development Areas To progress a plan-led approach to Future Strategic Long-Term Development Areas ('Future SDAs') to provide for the long-term housing growth and other landuse requirements of the County beyond the current Development Plan period (subject to future rezoning) at the following locations: · Belgard Road West · Adamstown South and West · Grange Castle / R136
CS2A Objective 1: To commence preparatory studies and analysis of the Future SDAs, as identified on the development plan maps, to understand the existing land uses and ecological sensitivities and to inform the preparation of future proposals for rezoning to meet the needs of the County through an holistic approach to plan making. The exact lands to be brought forward as future rezoning may change according to the outcome of these studies..
CS2A Objective 2: To ensure that future plan-led holistic development of the Future SDAs is not compromised by premature development.
CS2A Objective 3: To ensure development of Future SDAs (subject to rezoning) for residential and other uses will be in accordance with an approved plan-led approach, such as a Priority Area Plan or otherwise equivalent appropriate mechanism, which will align housing delivery, including investigating the feasibility of providing a minimum of 20% of units as fully accessible and identifying a unit target to be designed for specialist housing units in accordance with the relevant SDCC Housing Delivery Action Plan, with, inter alia, climate action objectives, supporting infrastructure, sustainable transport options, educational and community facilities, public open space, green infrastructure networks, cultural heritage and no net loss of important ecological features as surveyed, identified and mapped by a qualified ecologist.
CS2A Objective 4: To include an Area-Based Transport Assessments (ABTA) in cooperation with the NTA and Transport Infrastructure Ireland (TII) as part of the plan-led approach to Future SDAs
CS2A SLO1: To protect and enhance the Green Infrastructure Corridor along the western boundary with Kildare and protect the Grand Canal Corridor pNHA as part of any future development proposals for these lands to the south and west of Adamstown SDZ. Appropriate ecologically informed buffers for GI corridor

and the Grand Canal pNHA will form part of any such proposal.
CS2A SLO2: To carry out a study of the lands at Grange Castle / R136 to identify their future reallocation for alternative uses while retaining a 18 hole municipal golf course function within the lands and considering flood risk assessment, existing green infrastructure and riparian corridors
CS2A SLO3: The Area-Based Transport Assessment for these lands shall include an assessment of DART+ Southwest, Luas to Lucan, road infrastructure and existing bus services serving Adamstown and Clonburris at the early stages of the ABTA process for the purpose of identifying transport options for assessment at the later stages of the ABTA regarding sufficiency to serve existing and future transport demand scenarios.
CSA2 SLO4: To ensure that the plan-led approach for any future Strategic Development Area within Adamstown South and West (Outer) includes investigation of the need for an additional rail station and appropriate community, recreation, and leisure infrastructure to serve the lands, including an evidence based assessment of the need for a public swimming pool, a multi-sport campus comprising indoor and outdoor facilities, a Garda Station, and health facilities having regard to any deficits that may exist in the surrounding area and to the needs of the relevant stakeholders, and where considered such infrastructure is required, the appropriate delivery mechanisms for same.
CS7 SLO2: Development on RES zoned lands at Finnstown Castle shall comply with the following: 1. Development may not commence until Dart+ Southwest has commenced construction. 2. An infrastructure masterplan shall be submitted to the planning authority as part of a planning application for residential development, addressing the water and wastewater network upgrades as necessary to serve the subject lands while demonstrating that the needs of zoned lands in the surrounding area, including Clonburris SDZ, are not compromised. To be agreed with Uisce Éireann in advance of submission of a planning application. 3. Through appropriate studies or otherwise and having regard to the cumulative development potential around and including the subject lands, planning applications for residential development on the subject lands shall be informed by and address, inter alia: a. Retention and enhancement of the hedgerow and tree line on the north western boundary of the site as recorded on 1st Edition OS maps, b. A Social Infrastructure Audit and provision within development proposals to address any needs identified, c. A Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact, d. A Design Statement outlining how the proposal responds to the setting and special interest of the Protected Structure and its curtilage, e. A Public Open Space Audit to inform proposals for public open space and recreational facilities, and f. Provision for direct active travel connections from the subject lands into Adamstown SDZ.
CS7 SLO3:

Development on RES-N zoned lands to the west of Adamstown SDZ shall comply with the following: 1. Development may not commence until Dart+ Southwest has commenced construction. 2. An infrastructure masterplan shall be submitted to the planning authority as part of a planning application for residential development, addressing the water and wastewater network upgrades as necessary to serve the subject lands while demonstrating that the needs of zoned lands in the surrounding area, including Clonburris SDZ, are not compromised. To be agreed with Uisce Éireann in advance of submission of a planning application. 3. A masterplan for the lands, integrated with the existing parameters of the Adamstown SDZ Planning Scheme, shall be prepared by the planning authority or in consultation with, and approved by, the planning authority in advance of the submission of a planning application for residential development on the subject lands. Having regard to the cumulative development potential around and including the subject lands, the masterplan shall be informed by and address, inter alia: a. Retention and enhancement of the east-west hedgerow in the northern part of the site as recorded on 1st Edition OS maps, unless required for wider movement needs, b. A Social Infrastructure Audit and provision within development proposals to address any needs identified, c. A Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact, d. A Public Open Space Audit to inform proposals for public open space and recreational facilities, e. Provision for future infrastructure and access connections to lands to the south and west, including reservation for a future vehicular bridge over the railway line, unless determined otherwise in writing by the planning authority; and f. Ensure adequate educational capacity for sites adjacent to Adamstown are catered for in consultation with the Department of Education and Youth
CS7 SLO4: Development on RES-N zoned lands north of Tubber Lane shall comply with the following: 1. Development may not commence until Dart+ Southwest has commenced construction. 2. Development may not commence until Tobermaclugg Park, a phasing requirement of the Adamstown SDZ Planning Scheme, has commenced construction. 3. An infrastructure masterplan shall be submitted to the planning authority as part of a planning application for residential development, addressing the water and wastewater network upgrades as necessary to serve the subject lands while demonstrating that the needs of zoned lands in the surrounding area, including Clonburris SDZ, are not compromised. To be agreed with Uisce Éireann in advance of submission of a planning application. 4. A masterplan for the lands, integrated with the existing parameters of the Adamstown SDZ Planning Scheme, shall be prepared by the planning authority or in consultation with, and approved by, the planning authority in advance of the submission of a planning application for residential development on the subject lands. Having regard to the cumulative development potential around and including the subject lands, the masterplan shall be informed by and address, inter alia: a. Retention and enhancement of the north-south hedgerow as recorded on 1st Edition OS maps, unless required for wider movement needs,

b. Retain woodland as area of importance for wildlife and a key stepping stone in the wider ecological network; any interventions in or adjacent to the woodland should be informed by an EcIA and generally support the maintenance of such habitat as a refuge for wildlife, c. Lighting design and implementation should be informed by ecological surveys and seek to minimise impacts on wildlife via sensitive design in line with Institute of Lighting Practice Note 23/8 and any superseding guidance, d. Ensure compliance with G13 (Riparian Corridors) in relation to any watercourses on site, e. A Social Infrastructure Audit and provision within development proposals to address any needs identified, and to provide the planning framework to address social infrastructure and proactively engage with the relevant state agencies, f. A Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact, informed by options which can be demonstrated as being capable of being delivered as part of development, phased or otherwise, to provide access to high-capacity public transport as defined in the Sustainable Residential Development and Compact Settlement Guidelines, g. A Public Open Space Audit to inform proposals for public open space and recreational facilities, having regard to environmental sensitivities and ensuring the provision of an appropriate balance of passive and active amenity in the public open space; and h. Ensure adequate educational capacity for sites adjacent to Adamstown are catered for, in consultation with the Department of Education and Youth
CS7 SLO5: Development on RES zoned lands on Edmondstown Road shall comply with the following: a. A local centre to serve the day-to-day needs of surrounding residents shall be provided unless otherwise agreed in writing by the planning authority, b. A Design Statement shall be prepared as part of a planning application for the subject lands outlining how the proposal responds to the setting and special interest of the Protected Structure and its curtilage, c. Retention and enhancement of the existing hedgerows as recorded on 1st Edition OS mapping, d. Any road upgrades required to facilitate public transport to serve proposed residential development on these lands shall be delivered to provide for public transport improvements in advance of occupation of any units and measures to ensure the extension of public transport to this area and further north as far as the lands south of the M50 agreed with the NTA
CS7 SLO6: To ensure that any future development has regard to the boundary with and protection of the amenity and function of Edmondstown Golf Course.
CS7 SLO7: Development on RES zoned lands between Elder Heath and Kiltipper Road shall comply with the following: 1. A Transport and Traffic Assessment shall be carried out and submitted to the planning authority as part of a planning application for residential development on the subject lands, addressing access to and from the subject lands, measures to alleviate the impact of the proposed development on the surrounding road network, proposals to upgrade Kiltipper Road where necessary and active travel links from the subject lands to the surrounding area, and

2. Existing hedgerows shall be retained insofar as possible within development proposals and the north-south hedgerow representing the townland boundary of Oldbawn-Killinarden shall be protected.
CS7 SLO8: In tandem with, or prior to, development of the RES zoned lands to the south of Coldcut Road at the Dublin City Services Sports and Social Club, details as to how public access, permeability and recreational facilities will be improved on the remaining OS zoned lands shall be agreed with the planning authority.
CS7 SLO9: A phasing and delivery plan for the REGEN zoned lands between the N7 and Knockmeenagh Lane shall be prepared by the planning authority or in consultation with, and approved by, the planning authority in advance of a planning application for development on the subject lands. It shall be integrated with adjoining land uses, deliver on the parameters of the Knockmeenagh Framework site in the Clondalkin Local Planning Framework, including an evidence-based investigation of the potential for delivery of an all weather pitch on the lands in addition to the Artificial Grass Pitch Programme, and include a transport and movement plan, in liaison with TII, NTA and landowners and agreement with TII and the NTA.
CS7 SLO10: To ensure that any planning application on these lands adequately addresses vehicular access from the existing road network having regard to the need to protect the residential amenity of the adjoining area and safeguard the function of the national road network.
CS7 SLO11: a. Residential development on these lands shall have regard to the requirements of the Department of Education and Youth and any planning application on this site shall be accompanied by evidence that sufficient primary and secondary school capacity is available in the wider area to serve existing and proposed development. b. Ensure that future masterplans and development proposals for residential development within Liffey Valley MRC maximises opportunities for basement or undercroft car parking provision where feasible, to minimise the extent of surface level parking and maximise the availability of land for public open space, community facilities, active travel infrastructure, landscaping, biodiversity measures and high-quality public realm. c. Residential development on these lands shall include the provision of a multi-purpose community centre unless otherwise agreed by the Planning Authority.
CS8 SLO2: Development on RES-N zoned lands on the former golf course of the Citywest Hotel shall be in accordance with a masterplan for the lands to be prepared by the planning authority or in consultation with, and approved by, the planning authority, in advance of the submission of a planning application for residential development informed by and addressing, inter alia: a. An Ecological Impact Assessment to ascertain usage of the site and surrounding lands by mobile species, EcIAs to be undertaken by appropriately experienced and qualified ecologists and prepared in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM)

Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (CIEEM, 2018) and any superseding guidance; b. Lighting design and implementation should be informed by ecological surveys and seek to minimise impacts on wildlife through sensitive design in line with Institute of Lighting Practice Note 23/8 and any superseding guidance; c. Transport and Traffic Assessment detailing the impact of the proposed development and measures to alleviate its impact; d. Provision for a direct active travel link through the subject lands between Mill Road and Garter Lane; e. A site-specific FRA addressing both the ornamental surface water features within the site and the unmodelled watercourse to the south; f. An analysis of the existing water features to include for their incorporation as part of wider nature-based solutions to surface water management where feasible and appropriate; and g. Provision for a community centre / sports hall of approximately 1500sqm, or as agreed with the Planning Authority
CS9 SLO5: Development on RES-N zoned land south of Ballynakelly shall be in accordance with a masterplan for the lands to be prepared by, or in consultation with, the planning authority and approved by the Council in advance of the submission of a planning application for residential development which provides for, inter alia: 1.Delivery of a public park of a minimum of 2 hectares in tandem with, or prior to, development of the site, 2.Reservation of a secondary school site of 3 hectares unless otherwise agreed in writing by the planning authority having regard to the requirements of the Department of Education and Youth, 3.Active travel connections to the existing Taobh Chnoic Park and land to the east; and 4.Use of the existing unfinished structure on site in an early phase of development in a sustainable manner which is compatible with neighbouring residential uses, with consideration given to the facilitation of uses such as sports / community space where feasible.
CS9 SLO6: No development shall commence until a masterplan has been agreed with the planning authority showing how approximately 2 ha maximum of land within the RES zoning will be integrated as part of housing development to deliver a sports centre / facility for local sports club including pitch, clubhouse and training pitches.

Table 8-3: Principal Environmental Protection Measures Identified in the South Dublin CDP 2022-2028

SEA topic	Policy	Text
Climate Change	Policy CA1: Climate Action (CA)	To support the implementation of International and National objectives on climate action, including the Climate Action and Low Carbon Development Acts (and any amending legislation), the 'Climate Action Plan 2021' (and any updated Plans) and ensure that South Dublin's Climate Change Action Plan and County Development Plan are aligned.
Biodiversity Flora and Fauna	Policy NCBH1: Overarching	Protect, conserve and enhance the County's natural, cultural and built heritage, supporting its sensitive integration into the development of the County for the benefit of present and future generations
Biodiversity Flora and Fauna	Policy NCBH2: Biodiversity	Protect, conserve, and enhance the County's biodiversity and ecological connectivity having regard to national and EU legislation and Strategies.
Biodiversity Flora and Fauna	Policy NCBH3: Natura 2000 Sites	Conserve and protect Natura 2000 Sites and achieve and maintain favourable conservation status for habitats and species that are considered to be at risk through the protection of the Natura 2000 network from any plans or projects that are likely to have a significant effect on their coherence or integrity.
Biodiversity Flora and Fauna	Policy NCBH4: Proposed Natural Heritage Areas	Protect the ecological, visual, recreational, environmental and amenity value of the County's proposed Natural Heritage Areas and associated habitats and species.
Biodiversity Flora and Fauna	Policy NCBH5: Protection of Habitats and Species Outside of Designated Areas	Protect and promote the conservation of biodiversity outside of designated areas and ensure that species and habitats that are protected under the Wildlife Acts 1976 to 2018, the Birds Directive 1979 and the Habitats Directive 1992, the Flora (Protection) Order 2015, and wildlife corridors are adequately protected.
Biodiversity Flora and Fauna Landscape Cultural Heritage	Policy NCBH6: Dublin Mountain	Protect and enhance the visual, environmental, ecological, geological, archaeological, recreational and amenity value of the Dublin Mountains, as a key element of the County's Green Infrastructure network.
Biodiversity Flora and Fauna Landscape Cultural Heritage	Policy NCBH7: Liffey River Valley and Special Amenity Area Order	Protect and enhance the special amenity value of the Liffey Valley, including its landscape, visual, recreational, ecological, geological, and built heritage value, as a key element of the County's Green Infrastructure network and implement the provisions of the Liffey Valley Special Amenity Area Order (SAAO)

SEA topic	Policy	Text
Water		
Biodiversity Flora and Fauna Landscape Cultural Heritage Water	Policy NCBH8: Dodder River Valley	Protect and enhance the visual, recreational, environmental, ecological, geological and amenity value of the Dodder Valley, as a key element of the County's Green Infrastructure network.
Biodiversity Flora and Fauna Landscape Cultural Heritage Water	Policy NCBH9: Grand Canal	Protect and promote the Grand Canal as a key component of the County's Green Infrastructure and ecosystem services network, and protect and enhance the visual, recreational, environmental, ecological, industrial heritage and amenity value of the Grand Canal, recognising its sensitivities as a proposed Natural Heritage Area with adjacent wetlands and associated habitats
Biodiversity Flora and Fauna Heritage	Policy NCBH10: Invasive Species	Protect against and prevent the introduction and spread of invasive species within the County and require landowners and developers to adhere to best practice guidance in relation to the control of invasive species.
Biodiversity Flora and Fauna Landscape Cultural Heritage	Policy NCBH11: Tree Preservation Orders and Other Tree Protections	Review Tree Preservation Orders (TPO) within the County and maintain the conservation value of trees and groups of trees that are the subject of a Tree Preservation Order while also recognising the value of and protecting trees and hedgerows which are not subject to a TPO.
Biodiversity Flora and Fauna Landscape Cultural Heritage Water	Policy NCB12: Geological Sites	Maintain the conservation value and seek the sustainable management of the County's geological heritage resource.
Cultural Heritage Landscape Population and Human health	Policy NCBH13: Archaeological Heritage	Manage development in a manner that protects and conserves the Archaeological Heritage of the County and avoids adverse impacts on sites, monuments, features or objects of significant historical or archaeological interest.
Cultural Heritage Landscape	Policy NCBH14: Landscapes	Preserve and enhance the character of the County's landscapes, particularly areas that have been deemed to have a medium to high Landscape Value or medium to high Landscape Sensitivity and

SEA topic	Policy	Text
Population and Human health		to ensure that landscape considerations are an important factor in the management of development.
Cultural Heritage Landscape Population and Human health	Policy NCBH15: Views and Prospects	Preserve Views and Prospects and the amenities of places and features of natural beauty or interest including those located within and outside the County
Cultural Heritage Population and Human health	Policy NCBH18: Multi-Culturalism	Promote the County's multi-cultural heritage.
Cultural Heritage Population and Human health Landscape	Policy NCBH19: Protected Structures	Conserve and protect buildings, structures and sites contained in the Record of Protected Structures and carefully consider any proposals for development that would affect the setting, special character or appearance of a Protected Structure including its historic curtilage, both directly and indirectly
Cultural Heritage Population and Human health Landscape	Policy NCBH22: Features of Interest	Secure the identification, protection and conservation of historic items and features of interest throughout the County including street furniture, surface finishes, roadside installations, items of industrial heritage and other stand-alone features of interest.
Cultural Heritage Population and Human health Landscape	Policy NCBH23: Architectural Conservation and Design	Encourage appropriate design of new-build elements and interventions in historic buildings and environments.
Cultural Heritage Population and Human health Landscape	Policy NCBH25: Placemaking and the Historic Built Environment	Ensure that historic buildings and built environments are sensitively incorporated within development and regeneration schemes, taking advantage of their intrinsic attributes including character, visual amenity, sense of identity and place.
Cultural Heritage Population and Human health Climate change	Policy NCBH26: Climate Change, Adaptation and Energy Efficiency in Traditional and Historic Buildings	Secure the identification, protection and conservation of historic items and features of interest throughout the County including street furniture, boundary walls, surface finishes, roadside installations, items of industrial heritage and other stand-alone features of interest.

SEA topic	Policy	Text
Biodiversity Flora and Fauna Population and Human health Climate change	Policy GI1: Overarching	Protect, enhance and further develop a multifunctional GI network, using an ecosystem services approach, protecting, enhancing and further developing the identified interconnected network of parks, open spaces, natural features, protected areas, and rivers and streams that provide a shared space for amenity and recreation, biodiversity protection, water quality, flood management and adaptation to climate change.
Biodiversity Flora and Fauna Population and Human health Climate change	Policy GI2: Biodiversity	Strengthen the existing GI network and ensure all new developments contribute towards GI, in order to protect and enhance biodiversity across the County as part of South Dublin County Council's commitment to the National Biodiversity Action Plan 2021- 2025 and the South Dublin County Council Biodiversity Action Plan, 2020-2026, the National Planning Framework (NPF)and the East Region Spatial and Economic Strategy (RSES).
Biodiversity Flora and Fauna Population and Human health Climate change Water	Policy GI3: Sustainable Water Management	Protect and enhance the natural, historical, amenity and biodiversity value of the County's watercourses. Require the long-term management and protection of these watercourses as significant elements of the County's and Region's Green Infrastructure Network and liaise with relevant Prescribed Bodies where appropriate. Accommodate flood waters as far as possible during extreme flooding events and enhance biodiversity and amenity through the designation of riparian corridors and the application of appropriate restrictions to development within these corridors
Biodiversity Flora and Fauna Population and Human health Climate change Water Mater Assets	Policy GI4: Sustainable Urban Drainage Systems	Require the provision of Sustainable Urban Drainage Systems (SUDS) in the County and maximise the amenity and biodiversity value of these systems.
Biodiversity Flora and Fauna Population and Human health Climate change Water	Policy GI5: Climate Resilience	Strengthen the County's GI in both urban and rural areas to improve resilience against future shocks and disruptions arising from a changing climate.
Biodiversity Flora and Fauna Population and Human health	Policy GI6: Human Health and Wellbeing	Improve the accessibility and recreational amenity of the County's GI in order to enhance human health and wellbeing while protecting the natural environment within which the recreation occurs.

SEA topic	Policy	Text
Biodiversity Flora and Fauna Population and Human health Landscape Cultural heritage Climate change Water	Policy GI7: Landscape, Natural, Cultural and Built Heritage	Protect, conserve and enhance landscape, natural, cultural and built heritage features, and support the objectives and actions of the County Heritage Plan.
Population and Human health Material Assets	Policy QDP1: Successful and Sustainable Neighbourhoods	Support the development of successful and sustainable neighbourhoods that are connected to and provide for a range of local services and facilities.
Population and Human health Materials Assets	Policy QDP2: Overarching - Successful and Sustainable Neighbourhoods	Promote the creation of successful and sustainable neighbourhoods through the application of the eight key design principles to ensure the delivery of attractive, connected, and well-functioning places to live, work, visit, socialise and invest in throughout the County.
Population and Human health Materials Assets	Policy QDP3: Neighbourhood Context	Support and facilitate proposals which contribute in a positive manner to the character and setting of an area.
Population and Human health Materials Assets Climate change	Policy QDP4: Healthy Placemaking	Promote the delivery of neighbourhoods that are attractive, connected, vibrant and well-functioning places to live, work, visit, socialise and invest in.
Population and Human health Materials Assets Climate change	Policy QDP5: Connected Neighbourhoods	Promote short distance neighbourhoods and strive towards the achievement of 10-minute settlements over the lifetime of the Plan, promoting a more compact development form, sustainable movement, and ease of access to services, community facilities, jobs and amenities.
Population and Human health Landscape	Policy QDP7: High Quality Design – Development General	Promote and facilitate development which incorporates exemplary standards of high-quality, sustainable and inclusive urban design, urban form and architecture.

SEA topic	Policy	Text
Population and Human health	Policy QDP8: High Quality Design – Building Height and Density Guide (BHDG)	Adhere to the requirements set out in the Urban Development and Building Height Guidelines (2018) issued by the DHLGH through the implementation of the Assessment Toolkit set out in the South Dublin County's Building Heights and Density Guide 2021.
Population and Human health	Policy QDP9: High Quality Design - Building Height and Density	Apply a context driven approach to building heights in South Dublin, as supported by South Dublin's Building Heights and Density Guide.
Population and Human health	Policy QDP10: Mix of Dwelling	Types Ensure that a wide variety of housing types, sizes and tenures are provided in the County in accordance with the provisions of the South Dublin County Council Housing Strategy 2022-2028.
Population and Human health Landscape	Policy QDP11: Materials, Colours and Textures	Promote high-quality building finishes that are appropriate to context, durable and adhere to the principles of sustainability and energy efficiency.
Population and Human health Landscape	Policy QDP12: Sustainable Rural Neighbourhoods	Protect and promote the sense of place and culture and the quality, character and distinctiveness of the County's rural hinterland that makes it an attractive place to live, work and visit.
Population and Human health Material Assets	Policy QDP13: Plans/Frameworks – General	Continue to work closely with all infrastructure providers to ensure the timely delivery of social, community, economic and sustainable transportation infrastructure in tandem with new residential development and in accordance with the provisions of the County Development Plan or any Local Area Plan, SDZ Planning Scheme or framework/masterplan in place in the area.
Population and Human health Material Assets Climate change	Policy QDP16: Framework Plans (FP)	Prepare Framework Plans and Masterplans as required for identified areas on Council owned or other lands to facilitate a co-ordinated approach to development
Population and Human health Material Assets Climate change	Policy SM1: Overarching – Transport and Movement	Promote ease of movement within, and access to South Dublin County, by integrating sustainable land-use planning with a high-quality sustainable transport and movement network for people and goods.
Population and Human health Material Assets Climate change	Policy SM2: Walking and Cycling	Re-balance movement priorities towards sustainable modes of travel by prioritising the development of walking and cycling facilities and encouraging a shift to active travel for people of all ages and abilities, in line with the County targets.

SEA topic	Policy	Text
Population and Human health Material Assets Climate change	Policy SM3: Public Transport – General	Promote a significant shift from car-based travel to public transport in line with County targets and facilitate the sustainable development of the County by supporting and guiding national agencies in delivering major improvements to the public transport network.
Population and Human health Material Assets	Policy SM6: Traffic and Transport Management	Effectively manage and minimise the impacts of traffic within the County having regard to the need to provide shared road space for different users.
Population and Human Health	Policy COS1: Social Inclusion and Community Development	Promote social inclusion and community development and encourage active participation and social integration of minority and marginalised groups, consistent with RPO 9.1 and RPO 9.2 of the RSES.
Population and Human Health	Policy COS2: Social/Community Infrastructure	Support the planned provision of a range of universally accessible and well connected social, community, cultural and recreational facilities, close to the communities they serve, consistent with RPO 9.14 of the RSES. (See also Chapter 5: Quality Design and Healthy Placemaking)
Population and Human Health	Policy COS3: Community Centres	Ensure that communities across the county have access to multifunctional and intergenerational community centres that provide a focal point for community activities.
Population and Human Health	Policy COS4: Sports Facilities and Centres	Ensure that all communities are supported by a range of sporting facilities that are fit for purpose, accessible and adaptable.
Population and Human Health Landscape Climate Change	Policy COS5: Parks and Public Open Space – Overarching	Provide a well-connected, inclusive and integrated public open space network through a multi-functional high-quality open space hierarchy that is accessible to all who live, work and visit the County.
Population and Human Health	Policy COS6: Healthcare Facilities	Support the Health Service Executive (HSE) in their aim to provide access to a range of quality health services, in line with Sláintecare and relative to the scale of each settlement and community, and facilitate other statutory and voluntary agencies, and the private sector in the provision of healthcare facilities and services, including the system of hospital care and the provision of community based primary care facilities appropriate to the size and scale of each settlement.
Population and Human Health	Policy COS7: Childcare Facilities	Support and facilitate the provision of good quality and accessible childcare facilities at suitable locations within the County in consultation with the County Childcare Committee.

SEA topic	Policy	Text
Population and Human Health Material Assets	Policy COS8: Primary and Post Primary Schools	Policy COS8(a): Work in conjunction with the Department of Education and Skills to promote and support the provision of primary and post-primary schools in the County to reflect the diverse educational needs of communities. Policy COS8(b): Engage with the Department of Education and Skills and support the Department's School Building Programme by actively identifying sites for primary and post primary schools at suitable locations, based on forecast need.
Population and Human Health	Policy COS11: Arts and Cultural Facilities	Facilitate and support the continued development of arts and culture within the County.
All SEA topics	Policy IE1: Overarching Policy	Ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of our natural capital.
Water Resources Material Assets. Population and Human Health	Policy IE2: Water Supply and Wastewater	Ensure that water supply and wastewater infrastructure is sufficient to meet the growing needs of the population and to support growth in jobs over the lifetime of the Development Plan facilitating environmental protection and sustainable growth.
Water Resources Population and Human Health Biodiversity Flora and Fauna	Policy IE3: Surface Water and Groundwater	Manage surface water and protect and enhance ground and surface water quality to meet the requirements of the EU Water Framework Directive.
Water Resources Material Assets. Population and Human Health	Policy IE4: Flood Risk	Ensure the continued incorporation of Flood Risk Management into the spatial planning of the County, to meet the requirements of the EU Floods Directive and the EU Water Framework Directive and to promote a climate resilient County.
Material Assets. Population and Human Health	Policy IE5: Information and Communications Technology (ICT)	Promote and facilitate the sustainable development of a high-quality ICT network throughout the County in order to achieve social and economic development, whilst protecting the amenities of urban and rural areas.
Material Assets	Policy IE6: Waste Management	Implement European Union, National and Regional waste and related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.

SEA topic	Policy	Text
Air Quality and Noise. Population and Human Health. Biodiversity Flora and Fauna	Policy IE7: Environmental Quality	Seek to take appropriate steps to reduce the effects of air, noise and light pollution on environmental quality and residential amenity in line with European, National and Regional policy and legislation.
Air Quality and Noise Population and Human Health	Policy IE12: Noise	Discourage noise-sensitive developments in the immediate vicinity of airports and aerodromes.

9 Monitoring

9.1 Introduction

It is proposed, in accordance with Article 10 of the SEA Directive, to base monitoring on a series of indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality, for example water pollution levels. Monitoring will focus on the aspects of the environment that are likely to be significantly impacted upon by the implementation of the Variation.

The targets and indicators are derived from the Strategic Environmental Objectives (SEOs) discussed in Chapter Five. The target underpins the objective whilst the indictors are used to track the progress of the objective and targets in terms of monitoring of impacts. The monitoring programme will consist of an assessment of the relevant indicators and targets against the data relating to each environmental component. Similarly, monitoring will be carried out to ensure that any changes to the environment can be identified.

The monitoring programme is consistent with that of the South Dublin County Development Plan 2022-2028 SEA ER as this allows for consistency of monitoring and flexibility in relation to projects that may arise from the Variation that require consent under the South Dublin County Development Plan 2022-2028.

Table 9-1: SEA Monitoring Table from South Dublin County Development Plan 2022-2028

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
Biodiversity (Flora & Fauna) (B)	(B_1) Preserve, protect, maintain and where appropriate, restore the terrestrial, aquatic and soil biodiversity, of international, EU and nationally designated sites, protected species and habitats. (B_2) Ensure no adverse effects on the integrity of any European site, regarding its qualifying interests, associated conservation status, structure and function. (B_3) Maintain and where appropriate, enhance the biodiversity value of local designated and non-designated ecological and heritage areas, which function as stepping stones for migration, dispersal and	Preparation and implementation of a Green Infrastructure strategy for the county. • Preparation and implementation of actions in the SDCC Biodiversity Action Plan. • Implementation of actions in the SDCC Pollinator Plan. • That biodiversity is integrated into all decision making across the Plan. • Submission of Screening Report or Natura Impact Statement for proposed developments with planning applications in / and / or near European Sites. • No loss of protected habitats and species during the lifetime of the Plan. • Prevent the introduction or spread of invasive or alien species.	Number of actions implemented in the SDCC Green Infrastructure strategy. • Number of actions implemented in the SDCC Biodiversity Action Plan. • Number of actions implemented in the SDCC Pollinator Plan. • Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted. • The findings from SEA and AA (as relevant) for policies, plans, programmes etc. • Designation of additional areas due to biodiversity and / or geological value.	National Biodiversity and Pollinator Plans, SDCC Biodiversity and Pollinator Plans. All Ireland Pollinator Plan, GI monitoring including 'greening factor'. • Planning Data (APAS) reviews. • Internal monitoring of preparation of local land use plans. • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • Department of Culture, Heritage and the Gaeltacht report of the

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
	genetic exchange of wild species. (B_4) Enhance biodiversity in line with the National Biodiversity Strategy and its targets.		• Number / percentage of developments in / near Natura 2000 network. • Percentage of unique habitats and species lost in designated sites through trending of annual surveys • Number, type and location of invasive species identified.	implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). • Department of Culture, Heritage and the Gaeltacht National Monitoring Report for the Birds Directive under Article 12 (every 3 years). • Consultations and referrals to the NPWS other relevant prescribed bodies
Population & Human Health (PHH)	(PHH_1) Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection.	• Development within the residential and employment growth areas identified in the MASP. • Progress on implementation of extant planning permissions, delivery rate of	• Number / percentage of units delivered within overall settlements. • Implementation of Plan measures relating to the	• Internal review of progress on implementing Plan objectives. • SDCC Planning Data (APAS) and BCMS.

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
	(PHH_2) Provide high quality residential, community, working and recreational environments with access to sustainable transport options. (PHH_3) Ensure that existing population and planned growth is linked with the required infrastructure and the services (PHH_4) Protect human health and well-being from environment-related pressures.	units per neighbourhood within the overall settlement. • Lands for Employment monitor uptake of employment lands using land capacity study baseline. • Number of sites added and or removed from the 'Vacant Sites Register'. • Progression of works forming part of the Parks & Open Space Strategy Progression of roll out of Teen Space Programme 2021 and Sports Pitch Strategy. • Improved trends in quality of life related to these matters. • No significant deterioration in human health as a result of environmental factors. • Implementation of Cycle South Dublin Programme implementation of permeability projects arising from Sustainable Movement Studies; achievement of County Mode Split Targets for Walking and Cycling; number of schools participating in School Streets and Green Schools initiatives.	promotion of economic growth and employment. • Number of buildings listed on 2020 vacant and derelict site registers now in use. • Number of actions implemented in the Parks & Open Space Strategy / Sports Pitch Strategy. • Any occurrence of spatially concentrated deterioration in human health. • Number / area of green spaces and amenities available to the public	• Review of Strategy Implementation. • Implementing requirements of Corporate Plan / LECP. • POWSCAR112 data from next census, review of Council programmes. • SDCC Vacant Sites Register. • Consultations with the Health Service Executive and EPA. • CSO data. • Internal monitoring of preparation of local land use plans. • An Taisce Green Schools Programme, Roads Section.
Soils & Geology (SG)	(SG_1) Safeguard sensitive soil, resources and			

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
	geological heritage sites against pollution and degradation. (SG_2) Promote the sustainable use of infill and brownfield sites over the use of greenfield within the city. (SG_3) Safeguard designated geological sites	• Reduce the use of greenfield land by encouraging the reuse of brownfield sites. • Achieve the 40% target for growth on infill as per NPF. • Ensure sustainable extraction of non-renewable sand, gravel and rock deposits and the reuse and recycling of construction and demolition waste. • No incidences of soil contamination	• Number / percentage of new developments on brownfield sites. • Percentage of brownfield land developed over the Plan period. • Percentage of total greenfield land developed. • Volume of contaminated material generated from brownfield and infill. • Volume of construction and demolition waste recycled, in comparison with previous year/s. • Excessive land-filling of quality soils. • Incidences of soil contamination.	• Environmental Protection Agency (EPA), Geoportal. • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant)
Water Quality (W)	(W_1) Protect and where necessary improve and maintain water quality and the management of watercourses and groundwater and coastal waters in compliance with the requirements of the	• All waters within the Plan area to achieve the requirements of the WFD and the relevant River Basin Management Plan by 2027. • Surface and groundwater - Number of permissions for new developments which	• The status of water quality in the county's waterbodies and the proportion of 'good' and 'high' status waterbodies above 2020 baseline.	• EPA Monitoring Programme for WFD compliance. • EPA Remedial action list. • Internal monitoring of likely significant

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
	Water Framework Directive and Marine Strategy Framework Directive objectives and measures. (W_2) Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion. (W_3) Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals.	include and on-site wastewater treatment facilities. • Not to permit development where it would result in a WWTP exceeding the terms of its discharge license. • Encourage future population growth in areas served by urban WWTP and public water supplies. • Sustainable Water Management - compliance of relevant planning applications. • Progression of the flood relief schemes approved in the ten year Programme of Investment in Flood Relief Measures. • Compliance with the Flood Risk Management Guidelines at site and plan level	• Number of households served by urban wastewater treatment plants / septic tanks / individual WWTP or other systems. • Number of households served by public water supplies. • Number of developments granted planning permission that incorporate SUDs. • Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk. • Completion / progression of approved flood relief scheme	environmental effects of grants of permission (grant by grant). • OPW flood data. SDCC Planning Data (APAS).
Air Quality & Noise (AN)	(AN_1) To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport,	• Provide for increased use of public transport. • Increase number of cycle lanes and pedestrian routes in the plan area. • Improve ambient air quality trends, particularly in relation to transport-related emissions of NOx and particulate	• Uses of public transport. • Number of cycle lanes and pedestrian routes provided in the Plan area. • Air quality indicators. • Percentage compliance with EPA emission limits for	• CSO data. • Data from the National Travel Survey. • EPA Air Quality Monitoring & SDCC.

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
	residential heating and industry.	matter through reduction of private vehicle usage. • An increase in the percentage of the population travelling to work or school by public transport or non- mechanical means. • To promote reduced energy consumption and support the uptake of renewable retrofitting of buildings (including heating systems).	sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter. • Percentage population within the Plan area travelling to work or school by public transport or non mechanical means, above 2016 CSO figures. • Number of grants given for insulation works; energy efficiency of new buildings - energy rating figures.	• Consultations with Department of Transport Tourism and Sport, Transport Trends and Department of Communication Climate Action and Environment. • SDCC Planning Data (APAS). • SDCC Climate Change Team and action tracker. • Review of the Noise Action Plan. • Review standard planning conditions in relation to aerodrome / airport development.
	(AN_2) Minimise travel related emissions and encourage a modal change from car to more sustainable forms of transport.			
	(AN_3) Aim to meet Air Quality Directive standards for the protection of human health - Air Quality Directive.			
	(AN_4) Significantly decrease noise emissions associated with traffic and transport and other noise related industry etc.			
Climate Change (CC)	(CC_1) Minimise contribution to Climate Change by adopting mitigation and adaptation measures.	• Implementation of South Dublin Climate Action Plan 2019-2024. • Achieve transition to a competitive, low carbon, climate-resilient and	• Number of actions implemented in the SDCC Climate Action Plan.	• SDCC Climate Change Team and action tracker.

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
	(CC_2) Integrate sustainable design solutions into the city's infrastructure (e.g. energy efficient buildings; green infrastructure). (CC_3) Contribute towards the reduction of greenhouse gas emissions in line with national targets. (CC_4) Encourage and promote development resilient to the effects of climate change. (CC_5) Promote the use of renewable energy, energy efficient development and increased use of public transport.	environmentally sustainable economy by 2050. • Increased density and penetration of the public transport network including frequency of service - e.g. for urban and rural bus services. • Increase in the proportion of people resident in the county reporting regular cycling / walking to school and work above 2016 CSO figures. • Decrease in the proportion of journeys made by residents of the county using private fossil fuel-based car compared to 2016 levels. • Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by 2020. • Contribute towards the target of aggregate reduction in carbon dioxide (CO2) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors. • To promote reduced energy consumption and support the uptake of renewable	• Implementation of Plan measures relating to climate reduction targets as provided for by Plan provisions. • Number of new bus services or routes and new cycle lanes. • Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures. • Percentage population within the Plan area travelling to work or school by public transport or no mechanical means, above 2016 CSO figures. • A competitive, low-carbon, climate-resilient and environmentally sustainable economy. • Energy consumption, the uptake of renewable options and solid fuels for residential heating. • Number of grants given for insulation works; energy	• Yearly report on progress presented to Council. • POWSCAR113 data from next census. • EPA Annual National Greenhouse Gas Emissions • Inventory reporting. • Climate Action Regional Office. • Consultations with Department of Communication Climate Action and Environment. • CSO data.

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
		options and a move away from solid fuels for residential heating.	efficiency of new buildings - energy rating figures	
Cultural Heritage (CH)	(CH_1) Protect places, features, buildings and landscapes of cultural, archaeological and / or architectural heritage from impact as a result of development	• No permitted development which involves loss of cultural heritage, including protected structures, archaeological sites, Architectural Conservations Areas and landscape features. • To increase the number of uninhabited and derelict structures that are restored	• Number of developments permitted during the lifetime of the Plan which will result in the loss or partial loss of protected structures or sites of archaeological status. • Number of additions to the list of Protected Structures and Architectural Conservation Areas. • Number of uninhabited and derelict structures that are restored. • Number of planning applications for demolition and redevelopment of vacant and derelict site	• Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • Consultations with Department of Culture, Heritage and the Gaeltacht. • SDCC Planning Data (APAS) & Variation to CDP where necessary. • Protected Structures - Referral of planning applications & S.57 to conservation officers and relevant prescribed bodies. • ACAs - referral of planning applications to conservation officer and relevant prescribed bodies

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
Landscape & Visual (LV)	(LV_1) Protect and maintain the special qualities of the landscape character of South Dublin County, especially with regard to areas of high amenity - River Liffey, Royal Canal, Grand Canal and coastline.	• Ensure no significant disruption of significant natural or historic / cultural landscapes and features through objectives of the Plan. • Compliance with the Landscape Character Assessment and policies across all sections the Plan. • Permissions granted demonstrating compliance with Chapter 13 of the Plan.	• Number of developments permitted and their impacts on cultural / historic landscapes. • Number of developments located within a high landscape area that disrupt views (based on LCA).	• Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • SDCC Landscape Character Assessment. • SDCC Planning Data (APAS)
Material Assets (MA)	(MA_1) Make best use of existing infrastructure, promote the sustainable development of new infrastructure to match population distribution and protect existing assets, to meet the needs of South Dublin County's population. (MA_2) Promote the circular economy, reduce waste, and increase energy efficiencies (MA_3) Ensure there is adequate sewerage and drainage infrastructure in	• Reduction in the quantities of waste sent to landfill. Increase in the quantities of waste sent for recycling. • Waste - Review standard planning conditions in relation to waste management policy • Delivery of strategic water and wastewater infrastructure and improvements to existing water and wastewater infrastructure. • Rail / Bus / Public transport - implementation of public transport improvements; Achievement of County Mode Split Targets for public Transport.	• Percentage of waste going to landfill and recycling when compared with 2020 figures. • Percentage of waste used for energy production when compared with 2020 figures. • Number of critical infrastructural projects identified in the Plan completed. • Number of upgrades to water treatment plants and wastewater treatment plants undertaken within the Plan area.	• SDCC Planning Data (APAS) / Regional Waste Management Plan Reports; Planning conditions reviewed. • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • CSO data. • Consultations with Irish Water.

Strategic Environmental Objectives (SEOs) from the South Dublin County Development Plan 2022-2028		Targets	Indicators	Data sources
	place to support new development.	• Traffic / Transport - implementation of mobility management plans for large proposals; carrying out of traffic studies. • An increase in provision of cycle lanes and pedestrian routes.	• Number of public transport improvement works / projects. • Number of new bus services or routes and new cycle lanes.	• SDCC Planning Data (APAS) and Roads Section. • NTA and TII; POWSCAR114 data from future census data. • Department of Housing, Planning and Local Government in conjunction with Local Authorities. • Department of Communications, Climate Action and Environment.
	(MA_4) A reduction in energy demand from the transport sector and support moves to electrification of road and rail transport modes.			