STRATEGIC ENVIRONMENTAL ASSESSMENT
ENVIRONMENTAL REPORT

FOR THE

DUBLIN CITY CENTRE
TRANSPORT PLAN
2023

for: National Transport Authority / Dublin City Council

by: CAAS Ltd.

JULY 2024

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List of Abbreviations

AA	Appropriate Assessment
ACA	Architectural Conservation Area
CSO	Central Statistics Office
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EU	European Union
GDA	Greater Dublin Area
GSI	Geological Survey of Ireland
pNHA	Proposed Natural Heritage Area
NHA	Natural Heritage Area
NTA	National Transport Authority
OPW	Office of Public Works
RBD	River Basin District
RMP	Record of Monuments and Places
RPA	Register of Protected Areas
RBMP	River Basin Management Plan
RSES	Regional Spatial and Economic Strategy
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEO	Strategic Environmental Objective
SI No.	Statutory Instrument Number
SPA	Special Protection Area
WFD	Water Framework Directive

Glossary

Appropriate Assessment

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

Biodiversity and Flora and Fauna

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

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

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

Environmental Problems

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

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

Environmental Vectors

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

Mitigate

To make or become less severe or harsh.

Mitigation Measures

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

Protected Structure

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

Recorded Monument

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

Scoping

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

Strategic Actions

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

Strategic Environmental Assessment (SEA)

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

Strategic Environmental Objective (SEO)

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

Section 1 SEA Introduction and Background

1.1 Introduction and Terms of Reference

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Dublin City Centre Transport Plan 2023 (referred to hereafter as the Plan). The SEA has been undertaken by CAAS Ltd. on behalf of the National Transport Authority/Dublin City Council. The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan. The SEA is carried out in order to comply with the provisions of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No. 435 of 2004) as amended. This report should be read in conjunction with the Plan.

1.2 SEA Definition

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

1.3 SEA Directive and its transposition into Irish Law

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including transport.

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

1.4 Implications for the Plan

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

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

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

Section 2 The Transport Plan

2.1 Introduction

The purpose of the Dublin City Centre Transport Plan is to identify and prioritise changes to the current transport arrangements, which are necessary to fulfil the vision for the City as a sustainable, dynamic, and inclusive place, as set out in the Dublin City Development Plan (the "Development Plan").

The Plan also facilitates the implementation of the NTA's Transport Strategy for the Greater Dublin Area 2022-42 (the "Transport Strategy") by providing a more detailed framework for accommodating significantly higher numbers of people travelling into the City Centre, in particular by rail, bus, cycling and walking.

Since 2016, there has been significant investment in transport projects in Dublin City Centre, including Luas Cross City and improvements to the cycle network. This expenditure will increase exponentially as major infrastructure projects are realised over the coming decade.

While in the longer term MetroLink and future expansions to the Luas network will provide significant capacity improvements, the roll out of BusConnects and DART+ over the period of the Plan will provide a major increase in public transport capacity. Investment in active travel schemes is also predicted to significantly improve the offer for pedestrians, wheelers and cyclists.

These projects, some of which are already underway, will fundamentally change the public transport, walking and cycling provision in the city. In line with this, implementing these projects will require a change from the current transportation arrangements in the City Centre, particularly in terms of how traffic is managed.

New opportunities arise out of these proposed changes, and the reconfiguration of the transport networks within the City Centre offers a chance to explore how places can be transformed for the benefit of the city. The Plan identifies some of these new spaces, and offers examples of how they might develop into new focal points for Dublin.

The Plan envisages a new low traffic city centre with more space given over to the sustainable modes and with frequent and efficient public transport links and interchanges.

By reorienting the City Centre towards sustainable transport modes, the Plan will allow Dublin City Council to meet the mode share targets for 2028 set out in the Development Plan, as well as supporting the Council's efforts to achieve the national objective to reduce emissions from transport by 50% by 2030 in accordance with the Climate Action Plan.

2.2 Updating the 2016 City Centre Plan

In 2016, Dublin City Council, in conjunction with the National Transport Authority (NTA), published the Dublin City Centre Transport Study, which set out a framework for the managed implementation of transport projects across Dublin City Centre in line with the vision and objectives of the Dublin City Development Plan and the NTA's Transport Strategy for the Greater Dublin Area 2016-2035.

The current Dublin City Development Plan (2022- 2028) has encompassed the framework set out in the previous study, but the new policies and objectives of the Development Plan have required a corresponding update of the 2016 City Centre Transport Study. In line with this, the Development Plan Objective SMT05 requires Dublin City Council: "To review the City Centre Transport Plan 2016 in collaboration with the NTA in the lifetime of the plan, setting out a clear strategy to prioritise active travel modes and public transport use, whilst ensuring the integration of high quality public realm."

The Transport Plan gives local effect to the following national policies for Dublin City Centre:

- Climate Action Plans 2023 & 2024;
- National Sustainable Mobility Policy; and

- National Investment Framework for Transport in Ireland.

2.3 The Plan Area

While the overarching policies and approach of this plan applies to the full study area, the focus of the major physical interventions is on the smaller inner core as it is within this area where the requirement for additional priority for sustainable modes is greatest due to it being the busiest area where the national, regional and metropolitan transport networks converge. This inner core also captures the highest order attractions within the city, notably in terms of retail, employment, nightlife, as well as a concentration of nationally important cultural, educational and governmental institutions.

Analysis of existing travel data also highlighted that while this core is a key destination for people coming into the city, much of the private car traffic is travelling through it. In this regard, 6 out of every 10 cars driving into the Inner Core had a destination outside this core area.

2.4 Implementing the Dublin City Development Plan

The Plan identifies policies and projects that will assist in the implementation of the transport policies and objectives of the Dublin City Development Plan, within the City Centre area. Importantly, the Plan outcomes also support the delivery of a myriad of other Development Plan policies, including improving air quality, reducing the impacts of noise and protecting the built heritage.

In particular, the City Centre Transport Plan frames the implementation of the following Development Plan Sustainable Mobility and Transport policies, and their associated objectives:

SMT1 – Modal Shift and Compact Growth
SMT2 – Decarbonising Transport
SMT3 – Integrated Transport Network
SMT8 – Public Realm Enhancements
SMT11 – Pedestrian Network
SMT12 – Pedestrians and Public Realm
SMT14 – City Centre Road Space
SMT15 – Last Mile Delivery
SMT16 – Walking, Cycling and Active Travel
SMT18 – The Pedestrian Environment
SMT22 – Key Sustainable Transport Projects
SMT25 – On-Street Parking
SMT28 – Repurposing of Multi-Storey Car Parks

The City Centre Transport Plan also provides detail in support of, inter alia, the following Development Plan policies:

SC1 – Consolidation of the Inner City
SC2 – City's Character
SC10 – Urban Density
SC11 – Compact Growth
QHSN4 – Key Regeneration Areas
QHSN6 – Urban Consolidation
QHSN10 – 15-Minute City
CEE26 – Tourism in Dublin
CCUV15 – Premier Shopping Area
CCUV17 – Diversifying the City Centre
CCUV18 – Residential Development
CCUV19 – Parking and the Retail Core
CCUV42 – Public Realm – City Centre
SI34 – Management of Air Quality

Taken together, these policies give clear direction in terms of land use development and management of all transport modes in the City Centre. Notably, there is clear direction from the Development Plan that vehicular traffic in the City Centre needs to be managed. This is accompanied by a renewed emphasis on the need to better provide for higher capacity sustainable modes of travel, active travel and to more efficiently service the diversity of business, commercial and cultural activities within the city.

The Development Plan includes mode share targets for travel into Dublin City Centre. These targets are based on the Canal Cordon Counts undertaken every year and relate to travel into the centre during the peak 3-hour morning period.

The largest change required to the Canal Cordon mode share targets for 2028, as set out in the Development Plan, is in the Car/Taxis/Goods category where a 40% reduction in the existing mode share level is targeted in the Development Plan, with the reduction falling mainly on the private car as the demand for taxis and goods is likely to grow over the next number of years. The achievement of these targets will require a reorientation of the City Centre's streets towards sustainable modes of transport.

2.5 Implementing the Transport Strategy for the Greater Dublin Area

The Plan identifies priorities and objectives that will assist in the implementation of a number of key measures from the Transport Strategy. The delivery of these measures is critical to facilitate greater numbers of people travelling into the City Centre by sustainable modes of transport. These include the following:

CYC1 – GDA Cycle Network
BUS1 – Core Bus Corridor Programme
BUS4 – New Dublin Area Bus Service Network
LRT1 – MetroLink
RAIL1 – DART+

By 2030, the combination of major transport projects will facilitate a significant increase in the number of people travelling into the City Centre every day by public transport. The BusConnects service changes will increase capacity across the Metropolitan Area by approximately 25% with the City Centre remaining the focus of this network. DART+ West will increase capacity from 5,000 passengers per hour to 13,500 and DART+ South West from 5,000 to 20,000.

The Plan also facilitates and will be supported by other Transport Strategy measures such as Next Generation Ticketing, Transport Technology and Behavioural Change programmes, which will contribute to the delivery of these significant changes in how people move and live in Dublin City.

In addition to the above, there are numerous other DCC and NTA policies and objectives, such as parking standards, workplace parking charges and other emerging demand management measures, which will have a direct bearing on the transportation system in Dublin City Centre. Although the Plan does not address all of these issues specifically, it provides a context in terms of new transport arrangements, which can underpin the future delivery of these wider reaching policy measures.

While the concentration of public transport investment in the city centre is welcome, these schemes, along with numerous active travel projects, present considerable challenges to ensure that high frequency and high-capacity public transport services can operate efficiently. They also present a real opportunity for the city to be transformed and to realise the vision as set out by the elected members in the City Development Plan.

The scale and nature of all of these projects, however, cannot be accommodated within the existing road network without radical changes in how the general traffic network operates within the Inner Core.

2.6 Plan Vision

The vision for the Plan, as shared by Dublin City Council and the NTA is as follows:

> A thriving, active City Centre with sustainability and facilitation of emissions reduction as fundamental goals, where the transport system enhances freedom of movement and meets the environmental, social, cultural and economic needs of the people it serves.

2.7 Objectives

The overarching objectives and sub-objectives of the Plan are as follows:

- To Provide a Significantly Enhanced City Centre Environment
  - Transition to a low traffic City Centre;
  - Remove through private car traffic in order to provide more space for a growing number of City Centre residents, workers, shoppers and visitors;
  - Improve Air Quality;
  - Reduce transport and traffic noise;
  - Enhance the visual environment;
  - Improve the public realm;
  - Increase biodiversity; and
  - Protect and enhance the experience of the city's natural and architectural heritage.

- To Facilitate the Delivery of a Net-Zero City Centre Transport System
  - Transition to Zero Emissions transport;
  - Reduce access for carbon emitting vehicles;
  - Accommodate high-capacity low-emission public transport;
  - Prioritise walking and cycling; and
  - Provide the transport interventions that support compact and consolidated development.

- To Improve the City Centre's Economy and Liveability
  - Increase the opportunities for people to travel to, from, within and through Dublin

City Centre efficiently, effectively and sustainably;
- Increase the capacity of the transport system;
- Prioritise sustainable transport capacity;
- Prepare for the introduction of the major public transport projects and take advantage of the opportunities they will create;
- Support access for deliveries, people with disabilities, emergency services and other essential vehicles;
- Manage vehicular access to the City Centre;
- Meet the Dublin City Development Plan mode share targets;
- Support the night-time economy and cultural sectors; and
- Ensure that the City Centre is accessible for all.

2.8 Relationship with other relevant Plans and Programmes

The Transport Plan has been developed to be consistent with the wider planning framework, including the City Development Plan and the Transport Strategy, as detailed above.

The hierarchy of strategic actions, such as plans and programmes, within which the Plan sits, include those detailed in Appendix I (see also Section 3.2 "Hierarchy of Planning and Environmental Assessment", Section 4 "Relevant aspects of the current state of the Environment", Section 5 "Strategic Environmental Objectives" and Section 9 "Mitigation Measures").

The Plan aligns with legislation and documents setting out public policy for land use, transport and climate action and will be incorporated into the review and preparation of these documents. These include Project Ireland 2040, the Strategic Investment Framework for Land Transport, the National Investment Framework for Transport in Ireland, the Climate Action Plan 2023[1], the Regional Economic and Spatial Strategy for the Eastern and Midland Region and associated Dublin Metropolitan Area Strategic Plan, the Transport Strategy for the Greater Dublin Area and the City Development Plan. Certain transport related proposals already provided for by these documents (and considered by their environmental assessments) are amongst those included within the Plan.

The Plan is subject to a number of high-level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives in Section 5. Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status.

[1] Which includes various actions relating to transport planning e.g. Action No. TR/23/71(TF) "Strategic Transport Planning Work Programme" and associated steps relating to "Development & progression of national legislation, continued programme of review, update, appraisal and planning of services in line with MATS".

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

Figure 3.1 provides an overview of the integrated Plan preparation and SEA and AA processes. The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the SEA and AA have informed the Plan.

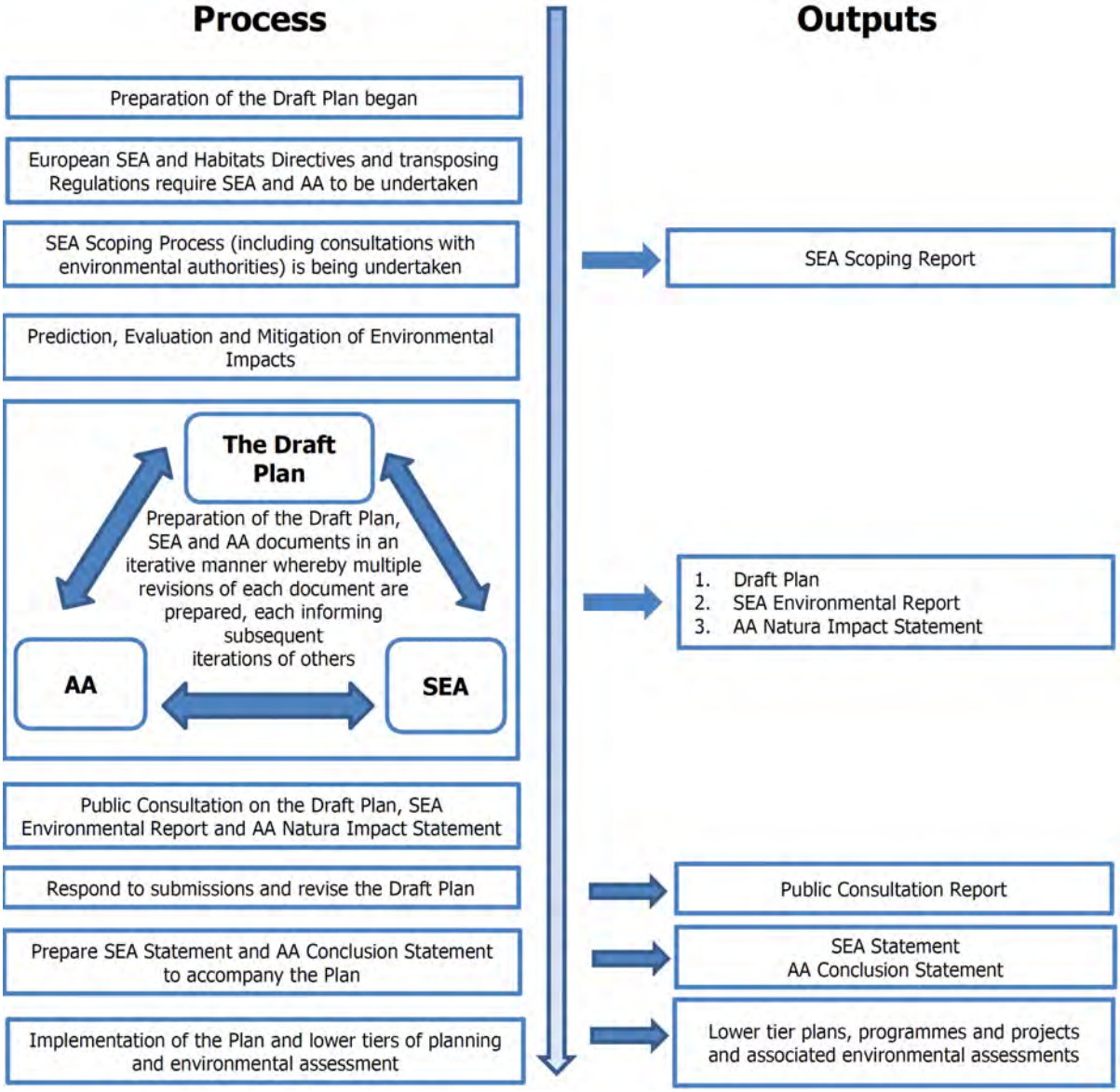

Figure 3.1 Overview of the Plan preparation and SEA and AA Processes

3.2 Hierarchy of Planning and Environmental Assessment

The Plan is situated in a hierarchy of documents setting out public policy for land use, transport and climate mitigation. These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and already provide for various measures that have been compiled into the Plan. The Plan aligns with these documents and will be incorporated into the review and preparation of these documents.

Individual transport projects must be consistent and comply with these higher-level documents setting out policy relating to land use and transport and are subject to their own project level EIA and AA requirements as relevant.

For more detail on the hierarchy, refer to Section 2 "The Transport Plan", Appendix I "Relationship with Legislation and Other Plans and Programmes", Section 4 "Relevant aspects of the current state of the Environment", Section 5 "Strategic Environmental Objectives" and Section 9 "Mitigation Measures".

3.3 Appropriate Assessment and Integrated Biodiversity Impact Assessment

3.3.1 Appropriate Assessment

Stage 2 Appropriate Assessment (AA) has been undertaken alongside the preparation of the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network[2] of European sites.

[2] Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: (a) no alternative solution available; (b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and (c) adequate compensatory measures in place.

3.3.2 Integrated Biodiversity Impact Assessment

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

Current State of the Environment

- Biodiversity data sources relevant for this city centre level assessment have been identified.
- Designated sites and other habitats and species of ecological value are identified.
- AA information has been incorporated into the SEA.

Alternatives

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

Impact assessment

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

Mitigation and monitoring

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

Reporting

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

Communication and consultation

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

3.4 Scoping

The scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are addressed was decided upon taking into account the level of detail included in the Plan and submissions from environmental authorities. Scoping allowed the SEA to become focused upon key issues relevant to the environmental

components which are specified under the SEA Directive[3].

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

Relevant environmental authorities[4] identified under the European Communities (Environmental Assessment of Certain Plans and Programmes), as amended, were sent SEA scoping notices by the project team indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the NTA/DCC. Submissions made by the Environmental Protection Agency (EPA) and the Geological Survey of Ireland (of the Department of Environment, Climate and Communications) have been taken into account in undertaking the assessments and preparing the Plan.

3.5 Environmental Report

In this SEA Environmental Report, an earlier version of which accompanied the Draft Plan on public display, the likely environmental effects of the Plan and the alternatives are predicted and their significance evaluated. The earlier version of the Environmental Report has been updated to take account of minor modifications[5] to the Draft Plan made in response to submissions received. The Environmental Report provides the decision makers, stakeholders and the public with a clear understanding of the likely environmental consequences of implementing the Plan.

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

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

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

3.6 SEA Statement

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

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

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

[4] Environmental authorities sent scoping notices as part of this process comprise: Environmental Protection Agency; Department of Environment, Climate and Communications; Department of Agriculture, Food and the Marine; and Department of Housing, Local Government and Heritage.

[5] Minor modifications were subject to Screening for SEA and AA and it was determined that, taking into account the measures that have already been integrated into the Draft Plan, modifications would not be likely to result in either significant environmental effects or likely significant effects on any European site.

Table 3.1 Checklist of Information included in this Environmental Report

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

Section 4 Relevant aspects of the current state of the Environment

4.1 Introduction

Reflecting the specifications in the SEA Directive, the relevant aspects of the current state of the environment for the following environmental components are identified in this section:

- Air and Climatic Factors;
- Population and Human Health;
- Biodiversity, Flora and Fauna;
- Material Assets;
- Water;
- Landscape;
- Cultural Heritage;
- Soil; and
- The interrelationship between the above factors.

Information which is relevant to lower tier planning and project development and associated environmental assessments is identified (note that Article 5 of the SEA Directive, in accordance with the established European principle of subsidiarity, requires that the Environmental Report includes the information that may reasonably be required taking into account, inter alia, the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment).

4.2 National Reporting on the Environment

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

Environmental Policy Position
A national policy position for Ireland's Environment.

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

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

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

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

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

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

Marine
Reduce the human-induced pressures on the marine environment.

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

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

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

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

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

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

Chapter 11 of the State of the Environment Report focuses on environmental pressures from transport, understanding the drivers for these pressures and looking at the transformation towards sustainable mobility within the sector. These pressures have been taken into account in undertaking the assessments and preparing the Plan.

4.3 Sustainable Development Goals

Implementation of the Plan will contribute towards efforts to achieve a number of the 17 Sustainable Development Goals of the 2030 Agenda for Sustainable Development, which were adopted by world leaders in 2015 at a United Nations Summit and came into force in 2016. These Goals include:

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

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

In the absence of the Plan, none of the environmental effects detailed in this report (see Sections 7 and 8) would happen as a result of the Plan; however, the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area (see Section 2) would continue to be implemented and applications for permission for new projects would continue to be made.

In the absence of the Plan, the delivery of the following, and associated environmental effects, would be less coherent and made more uncertain:

- Transport policies and objectives of the City Development Plan, within the City Centre area;
- A myriad of other Development Plan policies, including improving air quality, reducing the impacts of noise and protecting the built heritage; and
- Key measures from the Transport Strategy that are critical to facilitate greater numbers of people travelling into the City Centre by sustainable modes of transport.

Compliance with mitigation measures, including those outlined under Section 9 of this report, would be necessary in order to help ensure that significant adverse environmental effects do not occur.

4.5 Air and Climatic Factors

4.5.1 Overview

The key issue involving the assessment of the effects of implementing the Plan on air and climatic factors relates to emissions, including greenhouse gas emissions, arising from transport. Travel is a source of:

1. Noise;
2. Air emissions; and
3. Energy use.

The Plan is expected to facilitate contributions towards improvements in sustainable mobility, thereby facilitating contributions towards reductions in and limiting increases of noise, emissions to air and energy use. Such emissions and energy use would occur otherwise with higher levels of motorised transport and associated traffic.

More detail on transport, travel patterns and traffic is provided under Section 4.8.2.

4.5.2 Greenhouse Gas Emissions Trends

The key issue involving the assessment of the effects of implementing the Plan on climatic factors relates to greenhouse gas emissions arising from transport.

Ireland's Provisional Greenhouse Gas Emissions 1990-2020 (EPA, 2021) report details provisional estimates of greenhouse gas emissions for the period 1990-2020. 2020 total national greenhouse gas emissions are estimated to have declined by 3.6% on 2019 levels to 57.70 million tonnes carbon dioxide equivalent (Mt CO_2eq). This reduction in total emissions was likely driven by the COVID impact on transport and lesser quantities of peat used for electricity generation. It highlights that further transformative measures will be needed to meet National Climate ambitions.

Greenhouse gas emissions from the Transport sector decreased by 15.7% or 1.92 Mt CO_2eq in 2020. This decrease was largely driven by the impact of COVID restrictions on passenger car and public transport usage. International aviation, not included in national total emissions, declined by 65% in 2020 or by 2.17 Mt CO_2 eq.

The EPA's 2023 publication *Ireland's Greenhouse Gas Emissions Projections 2022-2040* provides an updated assessment of Ireland's total projected greenhouse gas emissions to 2040, using the latest inventory data for 2021 as the starting point. The report provides an assessment of Ireland's progress towards achieving its national ambitions under the Climate Action and Low Carbon Development (Amendment) Act 2021 and EU emission reduction targets for 2030 as set out under the Effort Sharing Regulation[6]. Key findings identified as part of the report are that:

- Ireland is not on track to meet the 51% emissions reduction target (by 2030 compared to 2018) based on these projections, which include most 2023 Climate Action Plan measures. Further measures still need to be identified and implemented to achieve this goal.
- The first two carbon budgets (2021-2030), which aim to support the achievement of the 51% emissions reduction goal, are projected to be exceeded by a significant margin of between 24% and 34%.
- Sectoral emissions ceilings for 2025 and 2030 are projected to be exceeded in almost all cases, including agriculture, electricity, industry, and transport.
- It is projected that Ireland can meet its original EU Effort Sharing Regulation target of a 30% emission reduction by 2030 (compared to 2005) if all measures and flexibilities are used. Reaching the new 42% EU emission reduction target will require full and rapid implementation of Climate Action Plan 2023 measures and further measures to be implemented.
- Emissions in the 'Additional Measures' scenario are projected to be 29% lower in 2030 (compared with 2018) whereas in the 'Existing Measures' scenario the emissions reduction is projected to be 11%. Faster implementation of measures will be required to meet both National and EU targets.
- Emissions from the energy industries sector are projected to decrease by between 50% and 60% over the period 2021 to 2030. Renewable energy generation is projected to range from 68% to over 80% of electricity generation as a result of projected further and rapid expansion in wind energy and other renewables.
- Manufacturing combustion emissions are projected to reduce by between 6% and 22% from 2021 to 2030 with the implementation of efficiency measures and renewable heat generation. However, industrial process emissions are projected to increase by 5% from 2021 to 2030 due to anticipated increased cement production.
- Total emissions from the agriculture sector are projected to decrease by between 4% and 20% over the period 2021 to 2030. Savings are projected from a variety of measures including switching to different fertilisers, limits on nitrogen fertiliser usage and bovine feed additives.
- Transport emissions are projected to decrease by 1% to 35% over the period 2021-2030. Measures that are projected to contribute to higher emissions reductions include 943,500 EVs by 2030, a 20% biodiesel blend rate and a 20% reduction in total passenger vehicle kilometres.
- Emissions from the residential sector are projected to decrease by 36% to 47% between 2021 and 2030 with commercial and public services sector emissions projected to decrease by 19% to 49%. Measures projected to achieve this include 5.7 TWh of biomethane used for heating, energy efficiency retrofits and the installation of up to 680,000 heat pumps in residential homes.
- Emissions from the land use, land use change and forestry sector are projected to increase over the period 2021 to 2030 as Ireland's forestry reaches harvesting age and changes from a carbon sink to a carbon source. Planned policies and measures for the sector, such as increased afforestation, water table management on agricultural organic soils and peatland rehabilitation, are projected to reduce the extent of the emissions increase.

4.5.3 Climate Mitigation and Adaptation

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

[6] Regulation (EU) 2018/842 of on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement.

The Climate Action Plan 2023 is the second annual update to Ireland's Climate Action Plan 2019 and provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as set out in the Climate Act 2021. The Plan lists the actions needed to deliver on climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically, to ensure alignment with legally binding economy-wide carbon budgets and sectoral ceilings. The Climate Action Plan 2023 addresses "Spatial and Planning Policy" by referring to the National Planning Framework, which must inform regional and local decision-making, through RSES and local authority development plans. The emerging Climate Action Plan 2024 builds upon the 2023 Plan by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings.

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

The National Adaptation Framework, published in 2018, sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework, several Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for. Local authorities must ensure that climate adaptation considerations are mainstreamed into all local policy, including planning policy. Following a review of the existing Framework under the 2021 Climate Action Plan, an updated Framework is expected to be published in 2023.

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

Dublin City Council's Climate Action Plan, Climate Neutral Dublin 2030, sets out how the Council can promote a range of mitigation, adaptation and other climate action measures, to help deliver on the National Climate Action Plan and the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. Climate Neutral Dublin 2030 sets out the actions that will be taken by the City Council to prepare the city and people living in it for the known impacts of climate change – flooding, sea level rise, extreme weather events and drought.

4.5.4 Alternative Fuels and Renewable Electricity Generation Targets

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

The first Renewable Energy Directive (RED)[7] was the most important legislation influencing the growth of renewable energy in the EU and Ireland for the decade ending in 2020. From 2021, RED was replaced by the second Renewable Energy Directive (REDII)[8], which continues to promote the growth of renewable energy out to 2030. RED set out two mandatory targets for renewable energy in Ireland to be met by 2020, while REDII sets new targets and criteria to be met by Ireland in 2030 and the interim. These targets are in the process of being updated again.

[7] Directive 2009/28/EC on the promotion of the use of energy from renewable sources.
[8] Directive (EU) 2018/2001 on the promotion of the use of energy from renewable resources (recast).

The overall renewable energy share is referred to as the overall RES target. REDII introduced a binding EU-wide target for overall RES of 32% in 2030 and requires Member States to set their national contributions to the EU-wide target. REDII also includes rules to ensure the uptake of renewables in the transport sector and in heating and cooling. As per the National Energy and Climate Plan (NECP) 2021-2030, Ireland's overall RES target is 34.1% in 2030. The sectoral targets are referred to as RES-E (electricity), RES-T (transport) and RES-H (heat). Ireland's NECP 2021-2030 set targets for RES-E of 70%, RES-H of 24% and RES-T of 14%, by 2030.[9]

On 30 March 2023, a provisional agreement was reached for a binding overall RES target of at least 42.5% by 2030. Agreement was also reached for EU states to aim for an overall RES target of 45% by 2030. Once this process is completed, the new legislation will be formally adopted and enter into force.

4.5.5 Energy Use

Due to the public health measures taken to combat the COVID-19 pandemic during 2020, total transport energy use was temporarily down by 26%, however, preliminary energy data from 2021 already shows the rebound of certain energy usage for transport to pre-COVID-19 levels, particularly with respect to petrol and diesel sources.[10]

4.5.6 Energy Security

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

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

4.5.7 Ambient Air Quality

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

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

In order to comply with the Directives mentioned above, the EPA measures the levels of a number of atmospheric pollutants across the country.[11] For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002).

The EPA's (2023) *Air Quality in Ireland 2022 Report* identifies that:

- Air quality in Ireland is generally good, however, there are concerning localised issues.
- Ireland met all of its EU legal requirements in 2022 but it did not meet the more stringent health-based World Health Organisation (WHO) Air Quality guidelines.
- Fine particulate matter ($PM_{2.5}$) from solid fuel combustion and nitrogen dioxide (NO_2) from vehicle emissions are the main pollutants.
- It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from $PM_{2.5}$.
- The choices people make in how they heat their homes and how they travel directly impact the quality of the air they breathe.
- Ireland's ambition in the Clean Air Strategy is to move towards the WHO Air Quality guidelines.

The report further identifies the critical role of local authorities in the enforcement and implementation of existing plans and

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

[10] Sustainable Energy Authority of Ireland (2021) *Energy in Ireland 2021 Report*

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

investment in infrastructure to encourage cleaner and healthier air quality choices:

- Local authorities must provide more resources to increase air enforcement activities and implement the new solid fuel regulations.
- Dublin local authorities must fully implement the Dublin Region Air Quality Plan 2021 to improve NO_2 levels in the Dublin Region.
- Investment in clean public transport infrastructure across the country must be maintained and increased.
- More safe footpaths and cycle lanes must be created to continue to increase active travel as a viable and safe alternative to car use and associated NO_2 emissions.

The Plan facilitates improvements in sustainable mobility, thereby facilitating reductions in and limiting increases of emissions to air. Such emissions would occur otherwise with higher levels of motorised transport and associated traffic.

4.5.8 Noise

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

- Draw up *strategic noise maps* for major roads, railways, airports and agglomerations, using harmonised noise indicators[12] and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels;
- Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and,
- Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.

In compliance with the Directive and transposing Environmental Noise Regulations (S.I. No. 140 of 2006), Noise Action Plans have been prepared for each local authority area within the country, including the Dublin Agglomeration Environmental Noise Action Plan (comprising: Dublin City Council; Fingal County Council; South Dublin County Council; and Dún Laoghaire-Rathdown County Council) in force within the Plan area.

Noise Action Plans act as a means of managing environmental noise, and meeting the aim of the Regulations of preventing, and reducing where necessary, environmental noise. One of the key inputs into Noise Action Plans is the development of strategic noise maps. Noise maps identify and prioritise cluster areas which will require further assessment and may require mitigation measures to be put in place. Roads, rail, Luas and port infrastructure are the dominant noise sources within the Plan area.

Noise mapping, in the form of noise contours for the L_{den}[13], from the EPA's third round of strategic noise mapping is provided on Figure 4.1 for the following sources within the Plan area (as specified by the Environmental Noise Regulations, 2018):

- Roads exceeding the flow threshold of 3 million passages per year for the Dublin agglomeration; and
- Rail exceeding the flow threshold of 30,000 vehicle passages per year.

Noise mapping is also provided outside of the Plan area (as specified by the Environmental Noise Regulations 2018) for major roads.

Dublin City Council has designated a number of quiet areas based on their low sound levels, meaning that they can provide people with a more tranquil space to visit, away from the noise of the rest of the City. The Plan takes into account available noise maps and the Dublin Agglomeration Environmental Noise Action Plan.

4.5.9 Existing Problems

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

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

[13] Day-evening-night level. It is a descriptor of noise level based on energy equivalent noise level (Leq) over a whole day with a penalty of 10 dB(A) for night time noise (23.00-7.00) and an additional penalty of 5 dB(A) for evening noise (i.e. 19.00-23.00).

Air quality and noise present challenges, especially in urban areas, as detailed under the relevant sub-sections above. With regard to air quality, air pollution from transport is dominated by NO_x emissions. Of these, NO_2 is particularly impactful from a health perspective. The Plan will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

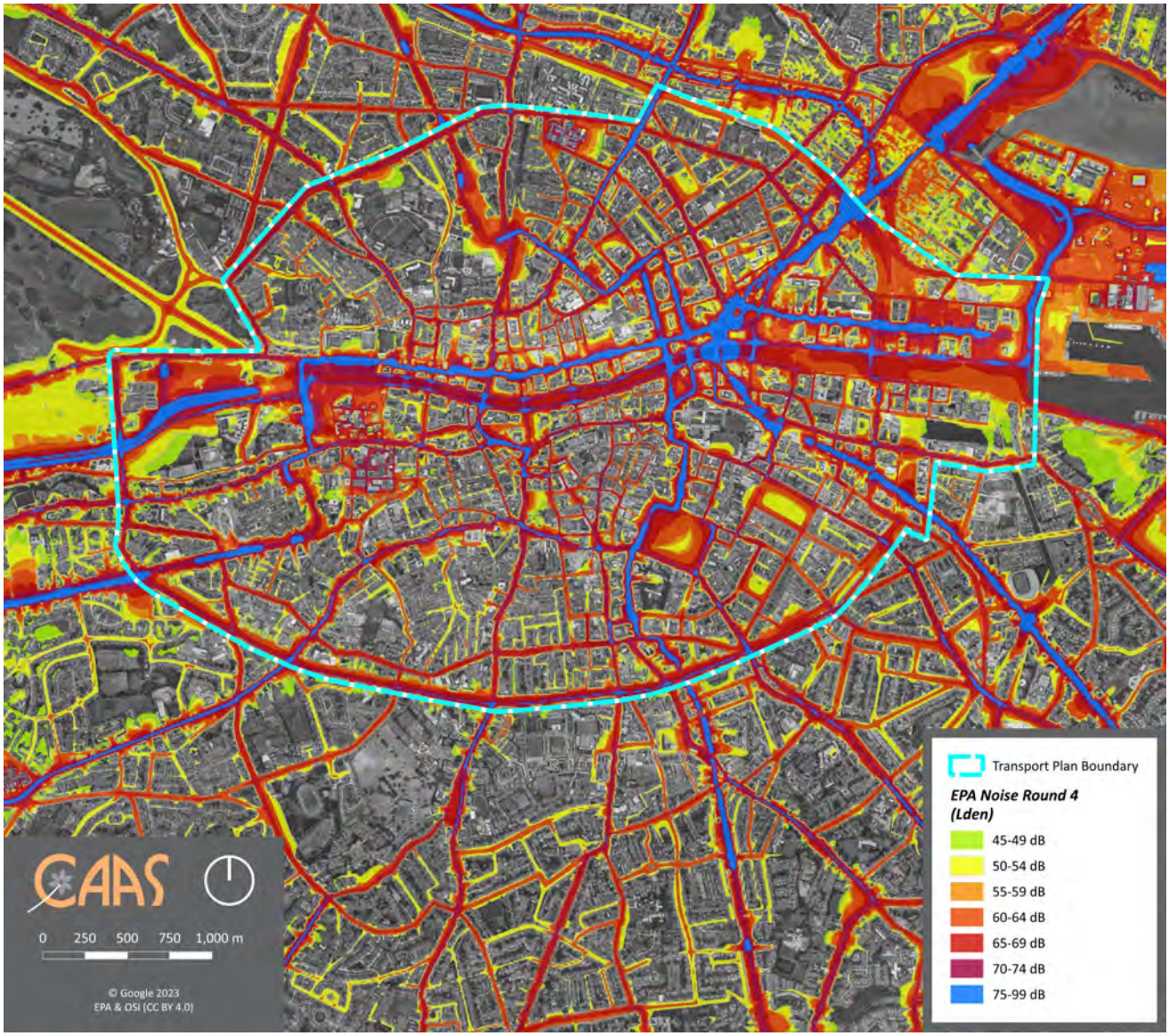

Figure 4.1 Noise Mapping L_{den} (day-evening-night composite noise indicator)

4.6 Population and Human Health

4.6.1 Population[14]

The Plan area covers the central part of Dublin City bounded by the Royal and Grand Canal with a population of approximately 130,000 persons. This area also contains approximately 195,000 jobs, as well as a variety of different land uses, levels of activity and accessibility. Within the Plan area, the Central Inner City Core captures the highest order attractions, notably in terms of retail, employment, nightlife, as well as a concentration of nationally important cultural, educational and governmental institutions.

Analysis of existing travel data highlighted that while the Central Inner City Core is a key destination for people coming into the city, much of the private car traffic is travelling through it. In this regard, 6 out of every 10 cars driving into the Central Inner City Core had a destination outside this core area. Most users of transport within the Plan area will reside in and commute to and from urban/suburban areas. Figure 4.2 shows population density per Electoral Division within and surrounding the Plan area.

Dublin City Centre is reliant on public transport for its economic welfare and for fostering its role as a cultural and entertainment core. It is also a critical element of the liveability of the City Centre by providing accessibility to a range of services and attractions to a large population. Prioritising active travel modes and public transport use will result in reductions in energy usage and air and noise emissions.

4.6.2 Human Health

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

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

4.6.3 Seveso (COMAH) Sites

Seveso Sites are defined as industrial sites that, because of the presence of dangerous substances in sufficient quantities, are regulated under the European Seveso-III Directive (2012/18/EU)[15].

Major industrial accidents involving dangerous substances pose a significant threat to humans and the environment; such accidents can give rise to serious injury to people or serious damage to the environment, both on and off the site of the accident.

The Seveso III Directive is transposed through the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015). The purpose of the COMAH Regulations is to lay down rules for the prevention of major accidents involving dangerous substances, and to seek to limit as far as possible the consequences for human health and the environment of such accidents, with the overall objective of providing a high level of protection in a consistent and effective manner. The intention is to achieve this through tiered controls on the operators of the establishments subject to the regulations - the larger the quantities of dangerous substances present at an establishment, the more onerous the duties on the operator (defined and listed as lower and upper tier sites).

[14] Dublin City Centre Transport Plan 2023

[15] There are a number of establishments and activities to which the Directive does not apply, including the transport of dangerous substances and directly related intermediate temporary storage by road, rail, internal waterways, sea or air, outside the establishments covered by the Directive, including loading and unloading and transport to and from another means of transport at docks, wharves or marshalling yards.

There are currently[16] 12 Lower Tier Seveso Establishments and 14 Upper Tier Seveso Establishments located within Dublin City Agglomeration, within which the Plan area is located.

4.6.4 Soil

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species.

As is the case with other historically developed areas across the country, there is potential for contamination at local sites within the Plan area, especially where land uses occurred in the past in the absence of the high standards of today's environmental protection legislation.

4.6.5 Existing Problems

There is historic and predictive evidence of flooding within the area (see Section 4.10.8).

Parts of the Plan area are vulnerable to adverse effects from small changes in sea level combined with changes in the occurrence of severe rainfall events and associated flooding of rivers and a number of smaller urban streams. Flooding in certain circumstances could pose a risk to human health.

Air quality and noise (see Section 4.5) also present challenges that have the potential to interact with human health.

[16] HSA; Notified Seveso Establishments for Lower Tier (2 August 2023) and Upper Tier (29 June 2023). https://www.hsa.ie/eng/your_industry/chemicals/legislation_enforcement/comah/list_of_establishments/

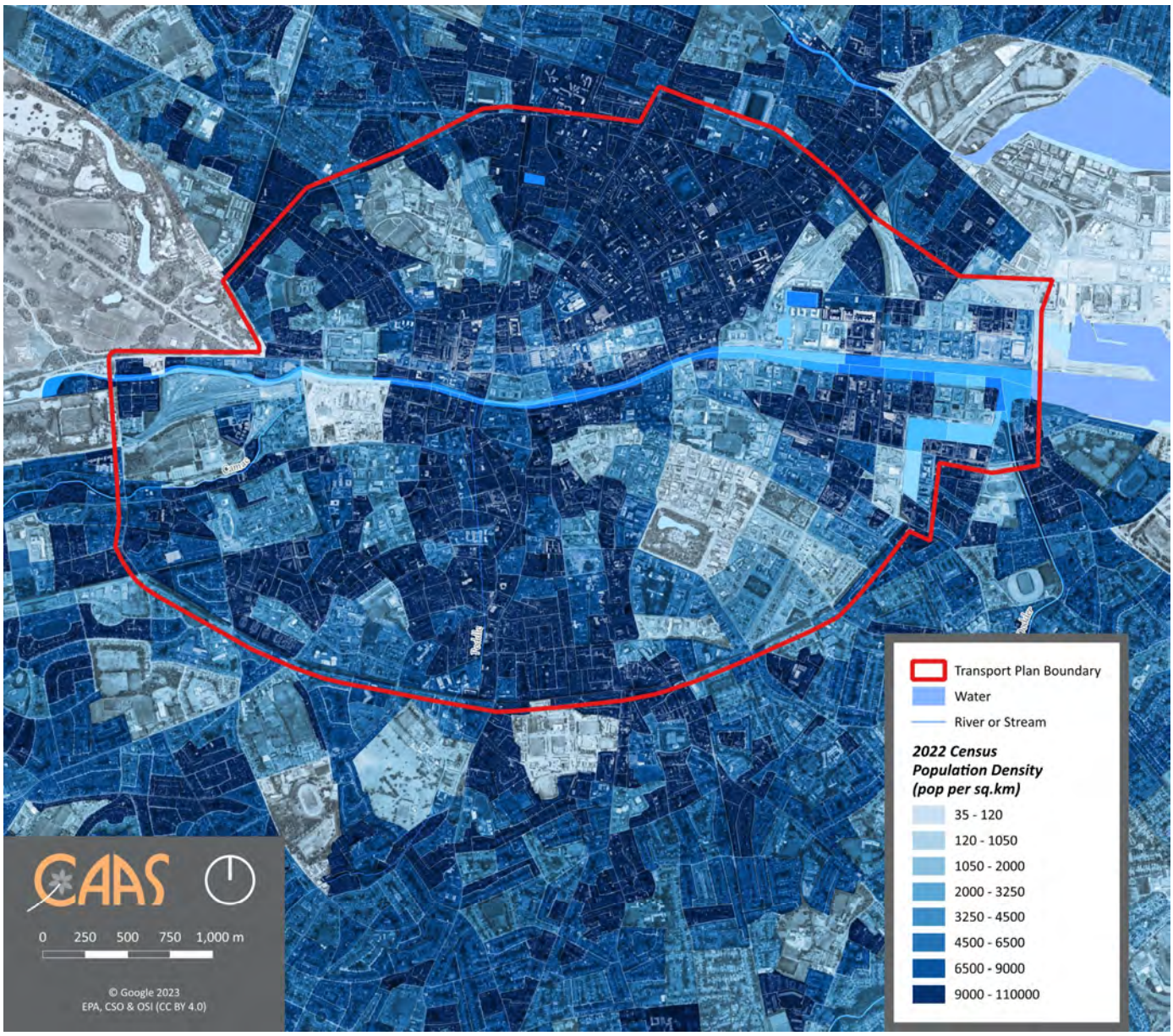

Figure 4.2 Population Density

4.7 Biodiversity and Flora and Fauna

4.7.1 Overview

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

Parks, rivers and canals are key areas for biodiversity across the Dublin City Centre area and provide multiple habitats for protected, rare and common species. Man-made and urban habitats within the Plan area can also include important biodiversity features. Areas containing the greatest extent of sensitive ecological features within the Plan area comprise Dublin City's ecological networks and corridors (such as the City's rivers, canals, railway lines, roadside verges, graveyards, amenity walks, old walls, gardens, old industrial sites, public parks and open spaces) – these features connect the Plan area with Dublin Bay, the Dublin and Wicklow Mountains, the Phoenix Park and other surrounding semi-natural areas.

The River Liffey, intersecting the central parts of the Plan area, supports protected fish species such as Atlantic salmon, brown trout, the critically endangered European eel, brook and river lamprey and the endangered white-clawed crayfish. The banks of the City's Royal and Grand canals, encompassing the Plan area, also provide important habitats for the extensive benthic communities (that include the protected opposite-leaved pondweed, glutinous snail, and coarse fish species). While many rivers are linked hydrologically by the River Liffey, the built-up nature of the riverbanks in urban areas is restricting terrestrial fauna from dispersing between the City's major rivers.[17]

Gardens provide habitats for a range of wildlife including various bird species, invertebrates such as bees and butterflies and mammals such as hedgehogs, mice, rats and foxes. These species move around between gardens using hedgerows and vegetated areas. These urban green spaces are of importance as they form part of a network of green spaces across the Plan area, in which animals and plants continue to thrive.

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

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

Ecological islands or areas of habitat that are not connected to surrounding ecologically valuable habitats can also be important.

Ecological designations within and surrounding the Plan area include:

- Special Areas of Conservation (SACs)[18];
- Special Protection Areas (SPAs)[19];
- Proposed Natural Heritage Areas (pNHAs)[20];
- Nature Reserves[21];
- Ramsar sites[22];
- OSPAR sites[23];
- United Nations Educational, Scientific and Cultural Organization (UNESCO) Biosphere sites[24];
- Certain entries to the Water Framework Directive Register of Protected Areas[25];

[17] Dublin City Biodiversity Action Plan 2021-2025

[18] For more detail refer to Section 4.7.2.1. Sites relevant to the Plan area are mapped on Figure 4.3.

[19] For more detail refer to Section 4.7.2.1. Sites relevant to the Strategy area are mapped on Figure 4.3.

[20] For more detail refer to Section 4.7.2.2. Sites relevant to the Plan area are mapped on Figure 4.4 and Figure 4.5.

[21] For more detail refer to Section 4.7.2.6.

[22] For more detail refer to Section 4.7.2.6.

[23] OSPAR is the mechanism by which 15 Governments and the EU cooperate to protect the marine environment of the North-East Atlantic. There is one OSPAR site adjacent to the Plan area, namely North Dublin Bay MPA (O-IE-0002968).

[24] For more details refer to Section 4.7.2.5.

- Special Amenity Area Order sites[26]; and
- Tree Preservation Orders (TPOs)[27].

Protected Species within and surrounding the Plan area include:

- Annex IV (Habitats Directive) species of flora and fauna, and their key habitats (i.e. breeding sites and resting places), which are strictly protected wherever they occur, whether inside or outside the above sites, e.g. Otter and bats;
- Other species of flora and fauna and their key habitats which are protected under the Wildlife Acts, 1976-2000, wherever they occur; and
- 'Protected species and natural habitats' as defined in the European Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including: Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) and Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur).

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

- EPA CORINE[28] and Tailte Éireann[29] land cover mapping (including areas likely to contain a habitat listed in Annex 1 of the Habitats Directive);
- Watercourses, wetlands and peatlands;
- Pollinator Areas;
- Other relevant County Development Plan designations and available local habitats mapping[30];
- The EPA's Framework National Ecological Network for Ireland[31]; and
- Other sites of high biodiversity value or ecological importance as identified by, for example, the Department of Agriculture, Food and the Marine (badger sets), relevant datasets from the National Biodiversity Data Centre and BirdWatch Ireland's 'Important Bird Areas' (Crowe et al., 2009).
- Downstream coastal and marine biodiversity, including relevant SACs, SPAs and pNHAs (see Sections 4.7.2.1 and 4.7.2.3), Water Framework Directive Registers of Protected Areas (see Sections 4.7.2.4 and 4.10.7) and the UNESCO Biosphere Reserve (see Section 4.7.2.5).

4.7.2 Further Detail

4.7.2.1 European Sites

Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. Special Protection Areas (SPAs) have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - due to their conservation value for birds of importance in the EU. Together, SACs and SPA are referred to as European sites. Additional information on European sites is provided in the AA Natura Impact Statement, which accompanies the Plan and this Environmental Report on public display.

The SEA uses the same zone of influence cited in the AA; a 15 km buffer around the Plan area. There are 21 European sites (12 SACs and nine SPAs) designated within this zone, however there are no European sites within the Plan boundary. All sites within this zone are mapped on Figure 4.3 and listed below:

- Baldoyle Bay SAC (Site Code: 000199)[32];
- Howth Head SAC (Site Code: 000202)[33];
- Malahide Estuary SAC (Site Code: 000205)[34];
- North Dublin Bay SAC (Site Code: 000206)[35];

[25] For more detail refer to Section 4.7.2.4 and Section 4.10.7.

[26] These Orders are made primarily to protect areas of outstanding natural beauty or special recreational value whilst having regard to any benefits for nature conservation. Also refer to Section 4.11.2.

[27] TPOs are a planning mechanism whereby individual trees or groups of trees can be identified as important and protected by a TPO. There are locations within the Plan area with trees protected by the Order. Also refer to Section 4.11.2.

[28] The CORINE land cover mapping classifies land cover under various headings. This dataset allows for the identification of lands that are likely to be most valuable to biodiversity including those which are likely to contain a habitat listed in Annex 1 of the Habitats Directive e.g. natural grasslands, peat bogs, salt marshes. CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface.

[29] Tailte Éireann National Landcover Mapping provides more detailed information about land cover in Ireland and is made available to private sector organisations to gain a deeper understanding of the environment and the challenges posed by development, habitat loss and climate change. For more detail refer to local authorities.

[30] Dublin City Council has prepared a Dublin City Habitat Map (2020), based on a comprehensive database of the habitats of the entire city, to inform and monitor planning and development. This has identified what types of habitats are found in the City, their locations, connectivity and importance. For more information refer to the Dublin City Biodiversity Action Plan 2021-2025.

[31] The EPA's Framework National Ecological Network provides a classification of the relative importance of areas by virtue of the biodiversity and flora that they contain and the connectivity they provide. Many of the areas identified are corridors.

[32] Sensitive features comprise: mudflats and sandflats not covered by seawater at low tide; Salicornia and other annuals colonizing mud and sand; Atlantic salt meadows; and Mediterranean salt meadows.

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

[34] Sensitive features comprise: mudflats and sandflats not covered by seawater at low tide; Salicornia and other annuals colonizing mud and sand; Atlantic salt meadows; Mediterranean salt meadows; shifting dunes along the shoreline with *Ammophila arenaria*; and fixed coastal dunes with herbaceous vegetation.

- South Dublin Bay SAC (Site Code: 000210)[36];
- Ballyman Glen SAC (Site Code: 000713)[37];
- Knocksink Wood SAC (Site Code: 000725)[38];
- Glenasmole Valley SAC (Site Code: 001209)[39];
- Rye Water Valley/Carton SAC (Site Code: 001398)[40];
- Wicklow Mountains SAC (Site Code: 002122)[41];
- Ireland's Eye SAC (Site Code: 002193)[42];
- Rockabill to Dalkey Island SAC (Site Code: 003000)[43];
- North Bull Island SPA (Site Code: 004006)[44];
- Baldoyle Bay SPA (Site Code: 004016)[45];
- South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024)[46];
- Malahide Estuary SPA (Site Code: 004025)[47];
- Wicklow Mountains SPA (Site Code: 004040)[48];
- Howth Head Coast SPA (Site Code: 004113)[49];
- Ireland's Eye SPA (Site Code: 004117)[50];
- Dalkey Islands SPA (Site Code: 004172)[51]; and
- North-West Irish Sea SPA (Site Code: 004236)[52].

[35] Sensitive features comprise: mudflats and sandflats not covered by seawater at low tide; annual vegetation of drift lines; Salicornia and other annuals colonizing mud and sand; Atlantic salt meadows; Mediterranean salt meadows; embryonic shifting dunes; shifting dunes along the shoreline with *Ammophila arenaria*; fixed coastal dunes with herbaceous vegetation; and humid dune slacks.

[36] Sensitive features comprise: mudflats and sandflats not covered by seawater at low tide; annual vegetation of drift lines; Salicornia and other annuals colonizing mud and sand; and embryonic shifting dunes.

[37] Sensitive features comprise: petrifying springs with tufa formation; and alkaline fens.

[38] Sensitive features comprise: petrifying springs with tufa formation; old sessile oak woods with *Ilex* and *Blechnum* in the British Isles; and alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*.

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

[40] Sensitive features comprise: petrifying springs with tufa formation.

[41] Sensitive features comprise: oligotrophic waters containing very few minerals of sandy plains; natural dystrophic lakes and ponds; Northern Atlantic wet heaths with *Erica tetralix;* European dry heaths; Alpine and Boreal heaths Calaminarian grasslands of the *Violetalia calaminariae*; species-rich Nardus grasslands, on silicious substrates in mountain areas; blanket bogs; siliceous scree of the montane to snow levels; calcareous rocky slopes with chasmophytic vegetation; siliceous rocky slopes with chasmophytic vegetation; and old sessile oak woods with *Ilex* and *Blechnum* in the British Isles.

[42] Sensitive features comprise: perennial vegetation of stony banks; and vegetated sea cliffs of the Atlantic and Baltic coasts.

[43] Sensitive features comprise: reefs.

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

[45] Sensitive features comprise: light-bellied brent goose; shelduck; ringed plover; golden plover; grey plover; and bar-tailed godwit.

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

[47] Sensitive features comprise: great crested grebe; light-bellied brent goose; shelduck; pintail; goldeneye; red-breasted merganser; oystercatcher; golden plover; grey plover; knot; dunlin; black-tailed godwit; bar-tailed godwit; and redshank

[48] Sensitive features comprise: merlin; and peregrine.

[49] Sensitive features comprise: kittiwake.

[50] Sensitive features comprise: cormorant; herring gull; kittiwake; guillemot; and razorbill.

[51] Sensitive features comprise: roseate tern; common tern; and arctic tern.

[52] Sensitive features comprise: red-throated diver; great northern diver; fulmar; manx shearwater; cormorant; shag; common scoter; little gull; black-headed gull; common gull; lesser black-backed gull; herring gull; great black-backed gull; kittiwake; roseate tern; common tern; arctic tern; little tern; guillemot; razorbill; and puffin.

4.7.2.2 Proposed Natural Heritage Areas

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

There are no NHAs designated within and within 15 km buffer zone of the Plan boundary. There are a total of 26 pNHAs designated within this zone (as mapped on Figure 4.4 and listed on Table 4.1 below), out of which two of these sites, namely the Royal Canal pNHA and the Grand Canal pNHA are partially within the Plan area (as shown on Figure 4.5).

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

Designation	Site Code	Site Name
pNHA	000128	Liffey Valley
	000178	Santry Demesne
	000199	Baldoyle Bay
	000201	Dolphins, Dublin Docks
	000202	Howth Head
	000203	Ireland's Eye
	000205	Malahide Estuary
	000206	North Dublin Bay
	000210	South Dublin Bay
	000211	Slade Of Saggart And Crooksling Glen
	000713	Ballyman Glen
	000725	Knocksink Wood
	000991	Dodder Valley
	001202	Ballybetagh Bog
	001205	Booterstown Marsh
	001206	Dalkey Coastal Zone And Killiney Hill
	001207	Dingle Glen
	001208	Feltrim Hill
	001209	Glenasmole Valley
	001211	Loughlinstown Woods
	001212	Lugmore Glen

	001398	Rye Water Valley/Carton
	001753	Fitzsimon's Wood
	001763	Sluice River Marsh
	002103	Royal Canal
	002104	Grand Canal

4.7.2.3 Land Cover Mapping

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.

CORINE[53] land cover mapping (as shown on Figure 4.6) identifies the land cover within and surrounding the Plan area as urban fabric, with a green urban area associated with the Phoenix Park adjacent to the western parts of the Plan area and industrial and commercial lands of the Dublin Docklands within the eastern parts of the Plan area.

There are also areas of estuaries and intertidal flats associated with the River Liffey and the Dublin Bay within and adjacent to the Plan area likely in the east, considering the CORINE data, to contain Annex I Habitats (as shown on Figure 4.7).

More detailed Tailte Éireann National Landcover Mapping may be of use to project level development and assessments.

4.7.2.4 Register of Protected Areas

In response to the requirements of the Water Framework Directive, a number of water bodies or parts of water bodies that must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (RPAs). RPAs relating to Nutrient Sensitive Waters and water bodies used for Drinking Water are addressed under Section 4.10 “Water”.

[53] The CORINE (Coordinated Information on the Environment) land cover data series was devised as a means of compiling geo-spatial environmental information in a standardised and comparable manner. CORINE has become a key data source for informing environmental and planning policy on a national and European level. The main land cover type in Ireland is agricultural land including forestry, which accounts for two-thirds of the national landmass. Most of this is permanent grassland pastures. Peatlands and wetlands are the second most widespread land cover type, covering almost one-fifth of the country. While forested areas cover about one-tenth of the country. Despite rapid development in the past two decades, Ireland's landscape is predominantly rural and agricultural.

There are also a number of water dependent habitats within the Plan area, which have been listed on RPAs – these relate to designated SACs and SPAs.

4.7.2.5 UNESCO Biosphere Designation

North Bull Island was designated as a Biosphere Reserve in 1981 because of its rare and internationally important habitats and wildlife and the designation was extended to the wider Dublin Bay in 2015, reflecting the Bay’s significant environmental, economic, cultural and tourism importance, and extends to over 300 km^2. Over 300,000 people live within the Biosphere.

The Transition Zone of the Biosphere (this zone comprises 173 km^2 and forms the outer part of the Biosphere, including residential areas, harbours, ports and industrial and commercial areas) is adjacent to areas that are part of both the Core Zone (this zone comprises 50 km^2 of areas of high natural value with key areas including the Tolka and Baldoyle Estuaries, Booterstown Marsh, Howth Head, North Bull Island, Dalkey Island and Ireland’s Eye) and the Buffer Zone, which comprises 82 km^2 of public and private green spaces such as parks, greenbelts and golf courses, which surround and adjoin the core zones.

The Plan area is partially intersecting the Transition Zone of the Dublin Bay UNESCO Biosphere Reserve, as shown on Figure 4.7.

4.7.2.6 Other Relevant Designations

Nature Reserves are areas of importance to wildlife, protected under Ministerial order. There are currently 78 Statutory Nature Reserves in Ireland. Most are owned by the State but some are owned by organisations or private landowners. The closest Nature Reserve to the Plan area is North Bull Island (as shown on Figure 4.8).

Ramsar Sites are wetlands designated to be of international importance under the Convention of Wetlands of International Importance (especially as Water Fowl Habitat), 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. The closest designated Ramsar sites to the Plan area are the North Bull Island and Sandymount Strand/Tolka Estuary (as shown on Figure 4.8).

4.7.3 Existing Problems

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

- Agriculture;
- Forestry;
- Extraction of resources (minerals, peat, non-renewable energy resources);
- Energy production processes and related infrastructure development;
- Development and operation of transport systems;
- Development, construction and use of residential, commercial, industrial and recreational infrastructure and areas;
- Extraction and cultivation of biological living resources (other than agriculture and forestry);
- Military action, public safety measures, and other human intrusions;
- Alien and problematic species;
- Mixed source pollution;
- Human-induced changes in water regimes;
- Natural processes (excluding catastrophes and processes induced by human activity or climate change);
- Geological events, natural catastrophes;
- Climate change; and
- Unknown pressures and pressures from outside the Member State.

Ireland's Article 12 Birds Directive Reports and the 6th National Report under the Convention of Biological Diversity identify similar issues.

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

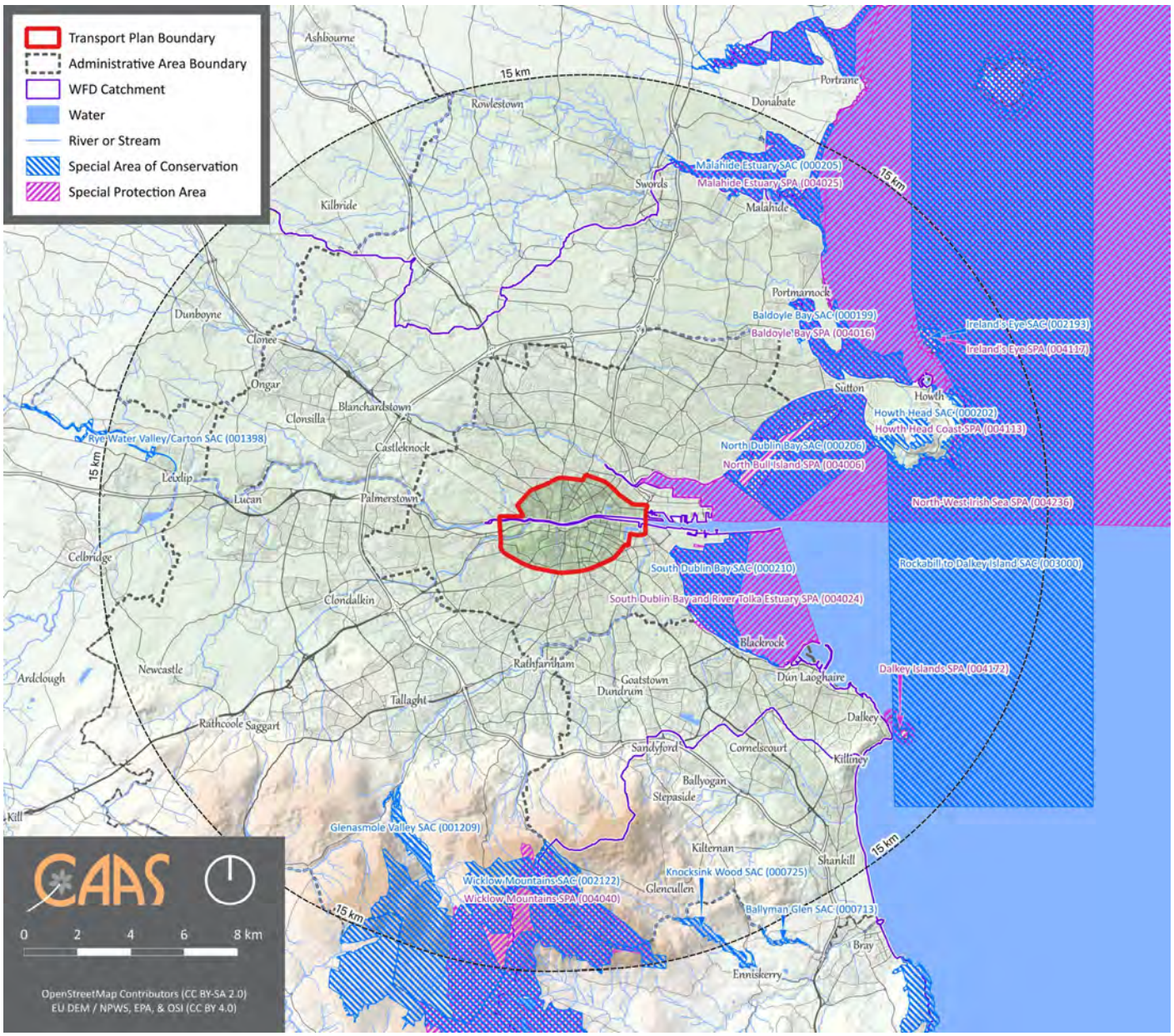

Figure 4.3 European sites within and within 15 km of the Plan area

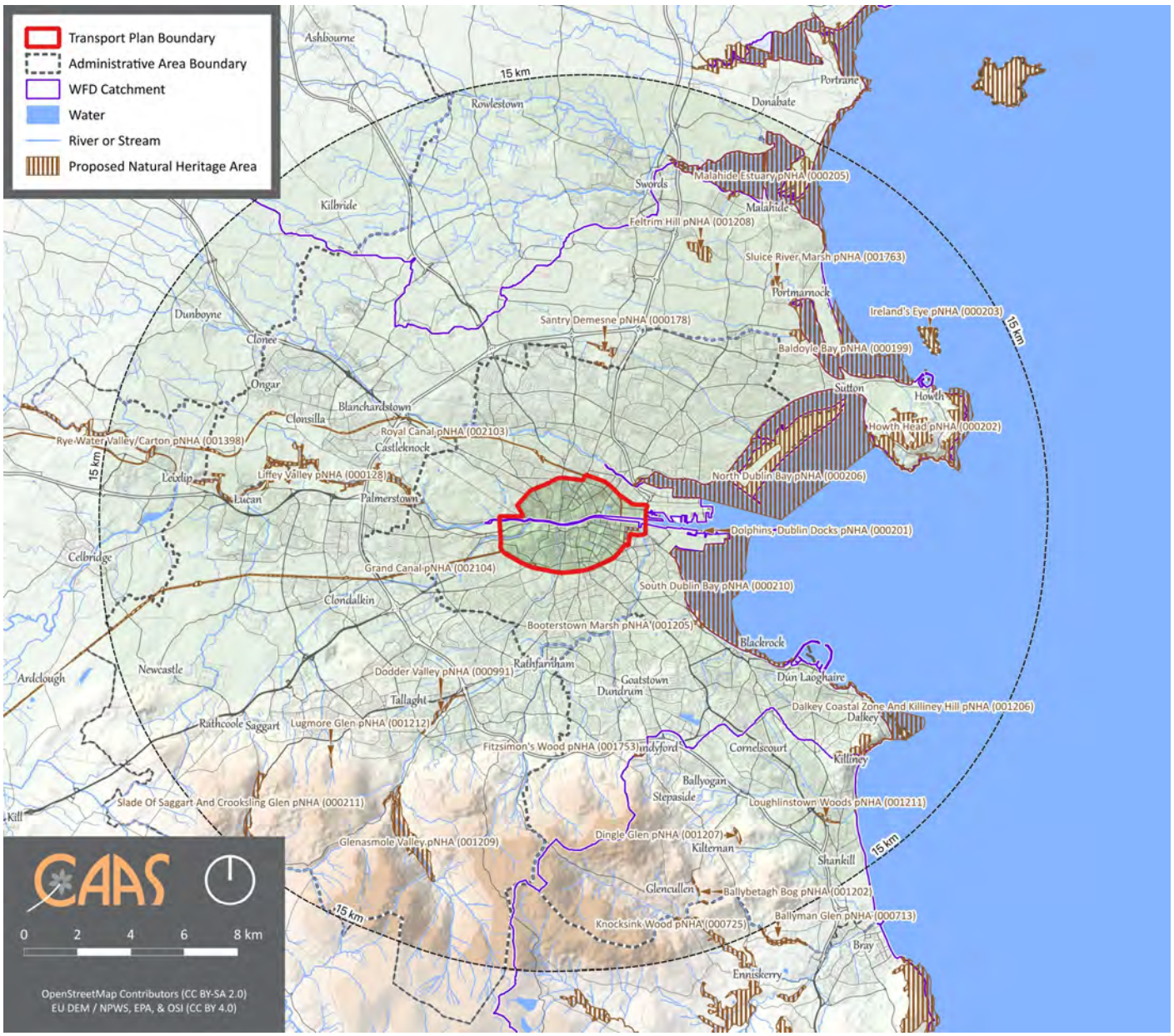

Figure 4.4 Proposed Natural Heritage Areas

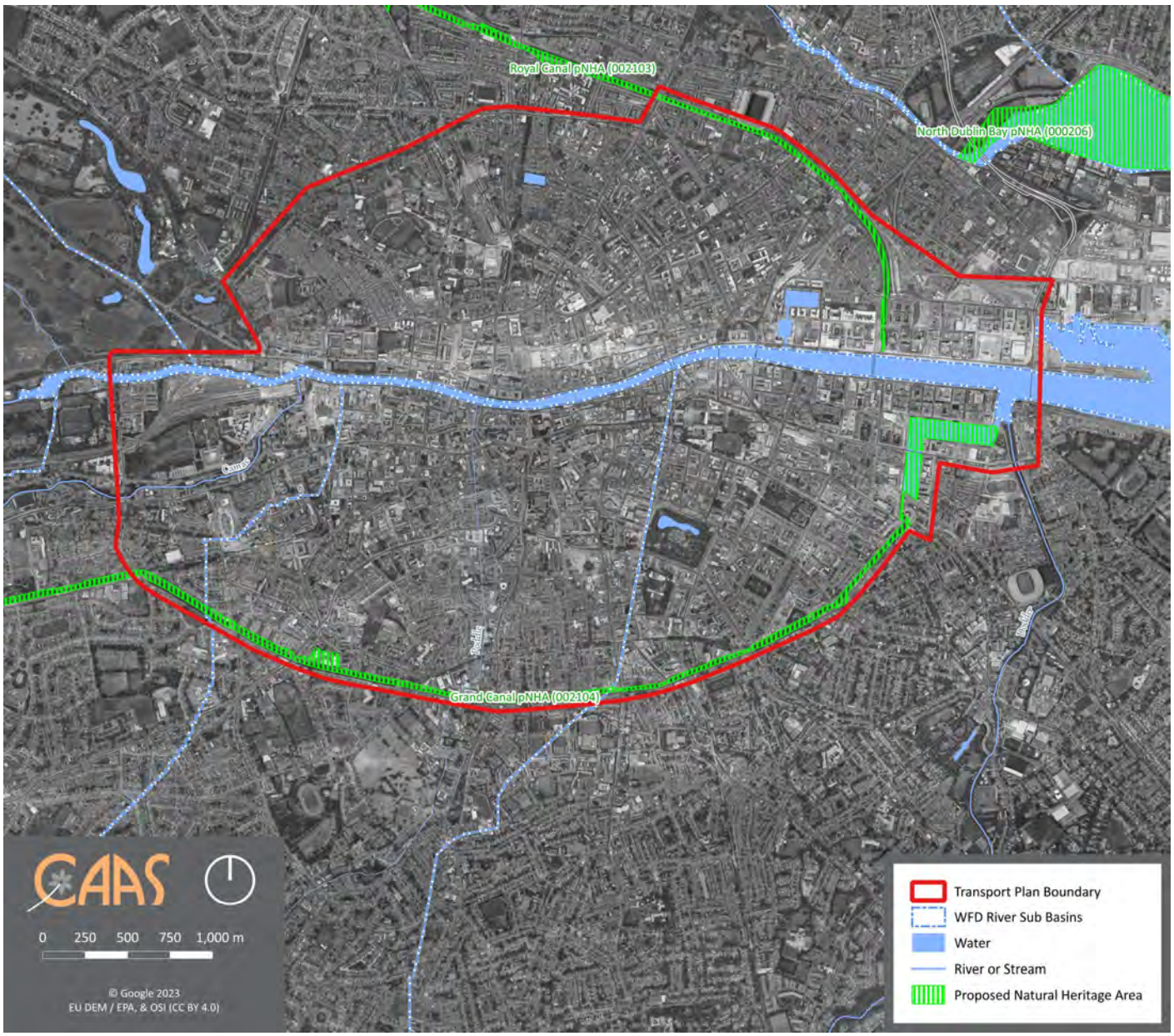

Figure 4.5 Proposed Natural Heritage Areas within and surrounding the Plan area

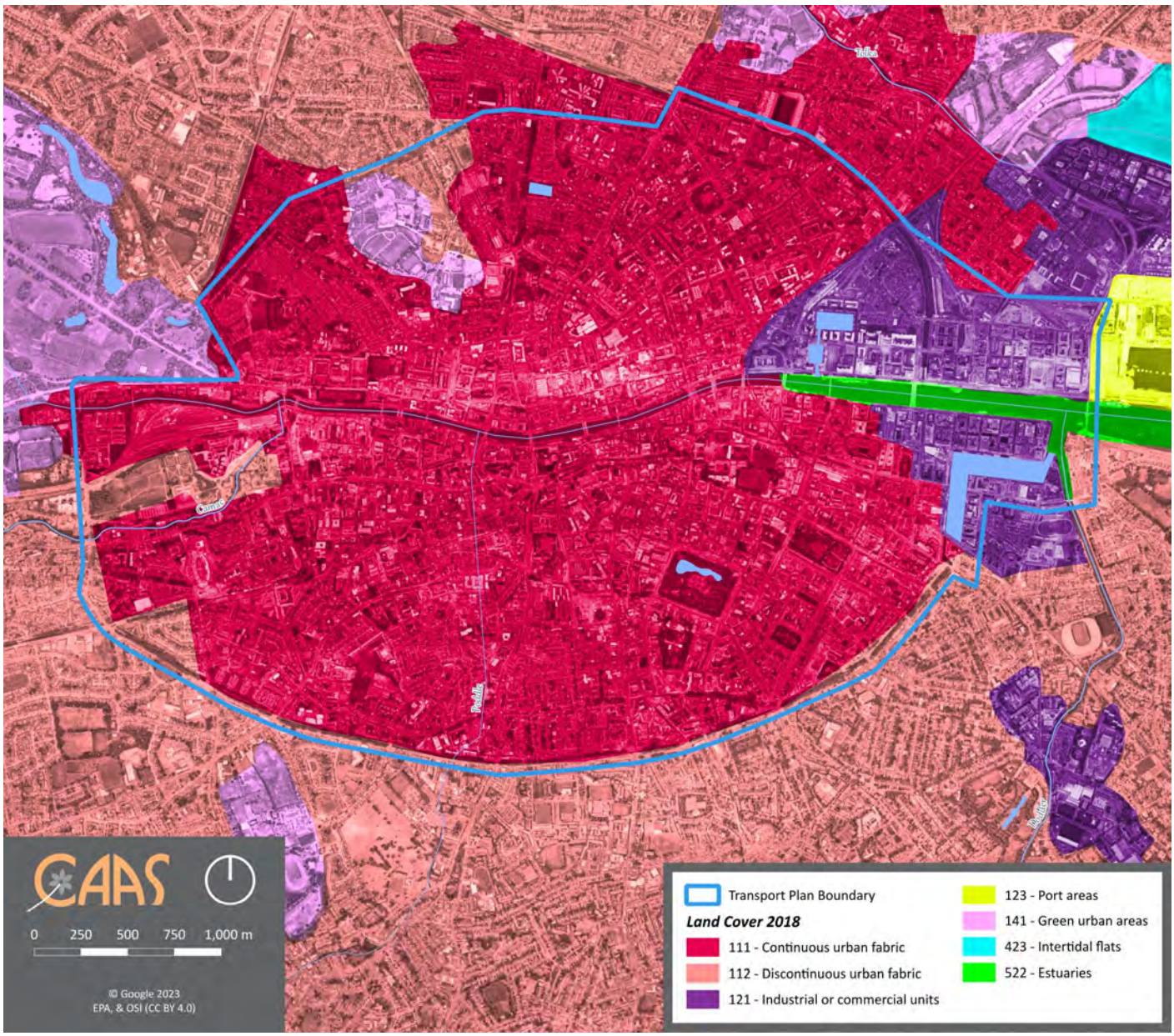

Figure 4.6 CORINE Land Cover

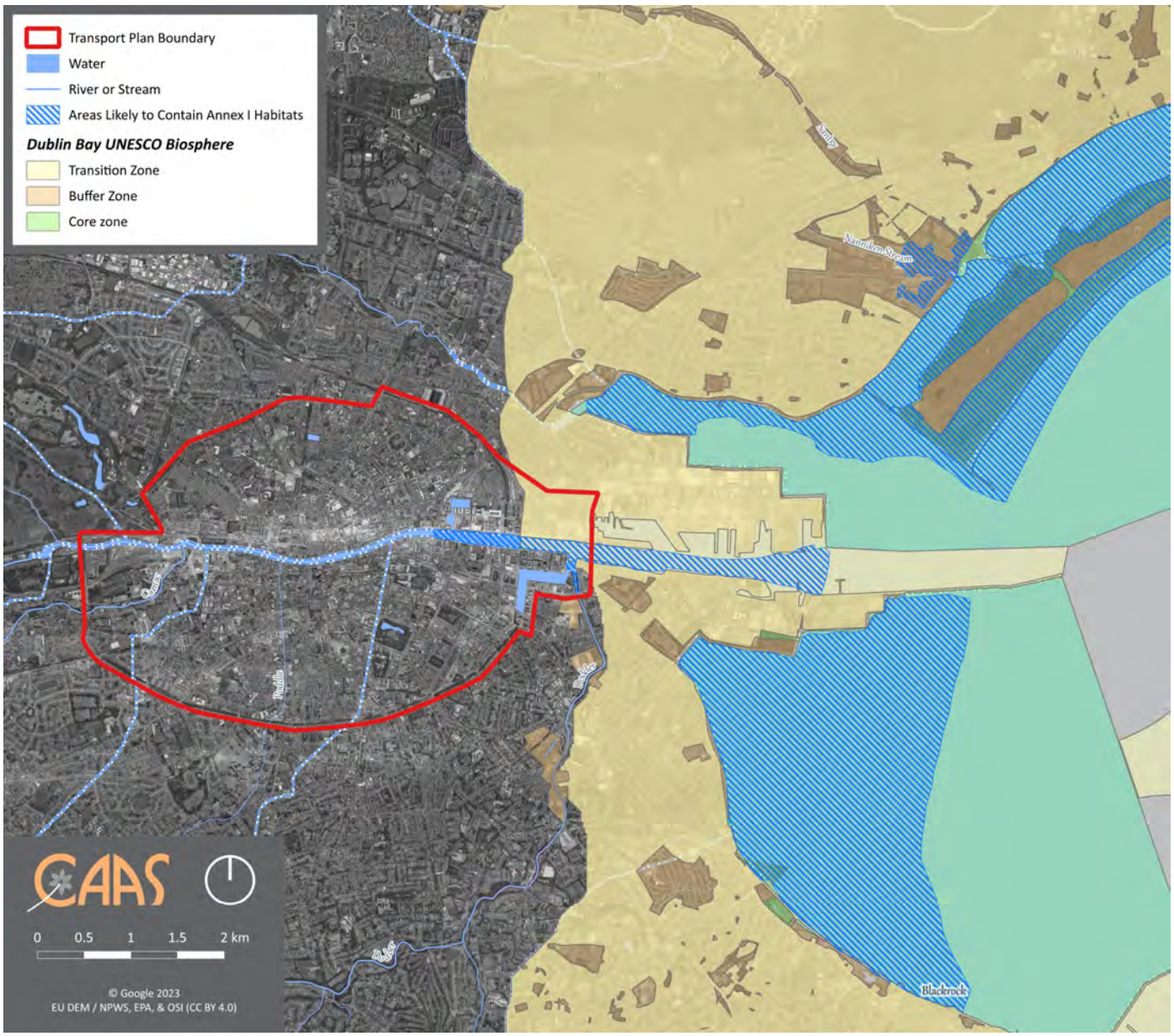

Figure 4.7 Dublin Bay UNESCO Biosphere

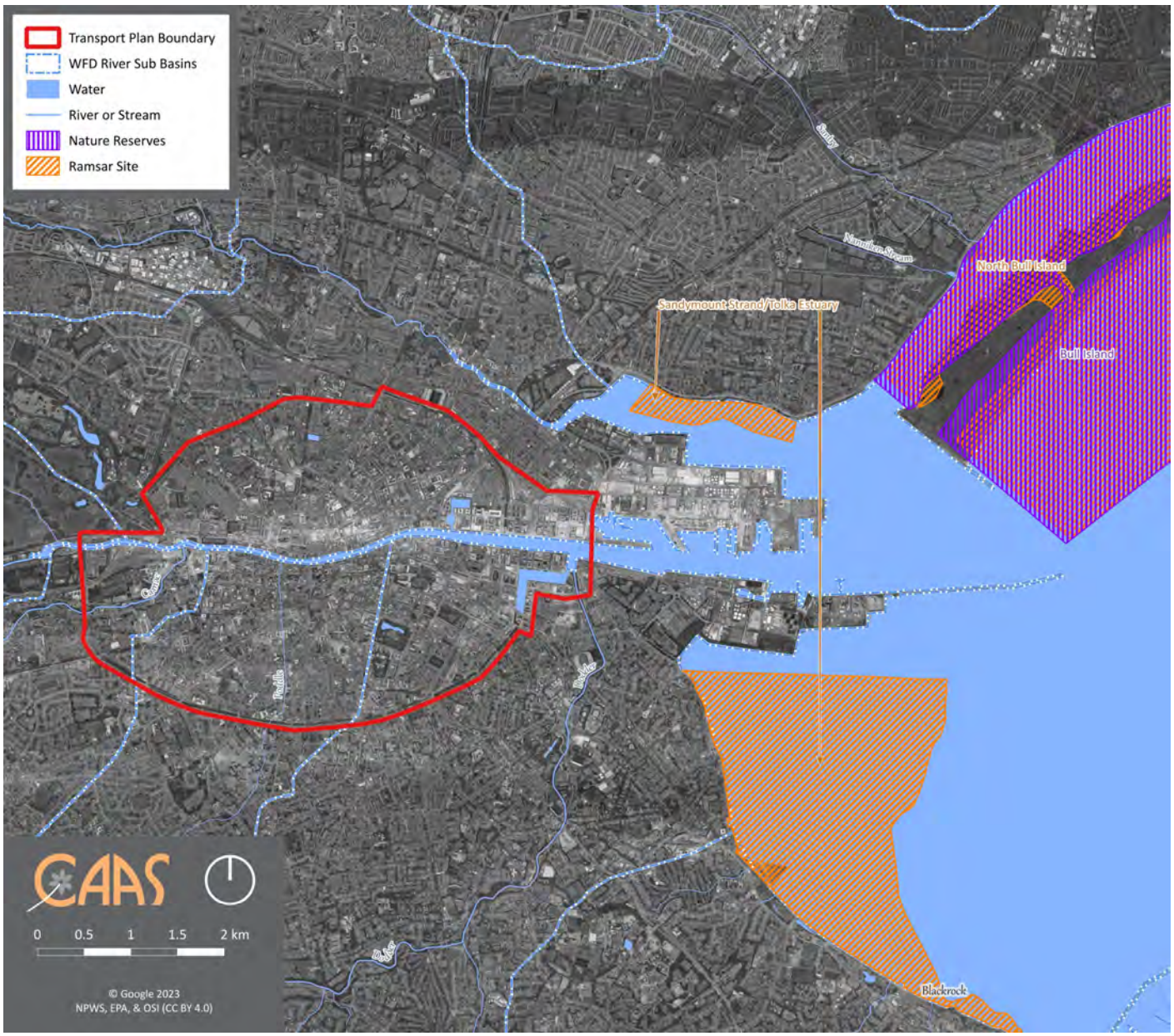

Figure 4.8 Other Ecological Designations

4.8 Material Assets

4.8.1 Introduction

Other material assets, in addition to those detailed below, covered by the SEA include archaeological and architectural heritage, natural resources of economic value, such as water[54], mineral resources and aggregates, County Geological Sites, fisheries and air (refer to other parts of this baseline description).

4.8.2 Transport[55]

The Plan relates to the transport sector and the management of traffic. Transport infrastructure is a material asset. Existing transport infrastructure across the Plan area includes railways, roads, bus and train stations, cycleways and paths. This infrastructure can support reductions in energy demand and emissions from the transport sector.

The long term trend in Dublin has been a significant reduction in the use of private cars to travel into the City Centre in the morning peak. The previous Dublin City Centre Transport Study (2016) identified that 192,000 people (2014 Canal Cordon Count data) travelled into the city centre in the morning peak, and that by 2023 it was expected that an additional 42,000 trips would need to be catered for. Between 2014 and 2019 the numbers travelling into the City centre rose by almost 25,000; however walking and cycling rose by 31,000 while people travelling by car reduced by 6,000. One of the main reasons for the rise in public transport was due to the successful introduction of the Luas Cross city link and the reduction in bus journey times along the Quays by the North and South Quay bus lanes.

Since the pandemic ended, there has been an overall recovery in public transport numbers across Dublin. The increase in home-working however, which is evident from the Census 2022 results, is also borne out by the 2022 Canal Cordon Count. Data from the 2022 count shows that overall demand to the City Centre in AM peak hours is down from 217,000 persons in 2019 to 177,000 in 2022. Car trips make up 27.7% of AM peak demand into the City Centre, steady with the share pre-pandemic. Overall, the proportion of trips into Dublin City Centre by sustainable modes stood at 71%, the 2nd highest figure on record after 2019.

Ongoing traffic surveys are regularly undertaken by Dublin City Council, and the most recent counts undertaken for traffic passing O'Connell Bridge, highlight the significant reduction in general traffic using the City Quays as a route through the city. Since 2017, there has been a 53% reduction in traffic on the North Quays and a 34% reduction in traffic on the South Quays. On average only 270 cars use the Bachelor's Walk approach to O'Connell Bridge per hour during the AM Peak period.

Looking more generally at traffic movements within the Inner Core of the City Centre, analysis undertaken by the NTA has shown that only 41% of all vehicles travelling into the Inner Core actually have a destination in this area. It is recognised that this traffic is essential for the functioning of the city, and that it is not always possible for people to be able to change their mode for a variety of reasons.

In terms of through traffic, the data highlights that 6 out of every 10 cars are simply using the city centre roads as the most convenient route to reach destinations outside the City Centre. There is no specific requirement for this traffic to be in the City Centre, and these vehicles could be using different routes to their destination.

What this means is that almost two thirds of private vehicles driving within the inner city could be removed without impacting on the vitality and viability of the economic and cultural life of this area, because they are simply passing through the core with no business there.

4.8.3 Public Assets and Infrastructure

Public assets and infrastructure which have the potential to be impacted upon by the development of transport infrastructure, if unmitigated, include 'on the ground' resources such as public open spaces, parks and recreational areas; public buildings and services; utility infrastructure (electricity, gas, telecommunications, water supply, wastewater

[54] Including freshwater, transitional and coastal waters.
[55] Dublin City Centre Transport Plan

infrastructure etc.). These resources are located throughout the Plan area.

4.8.4 Land

The Plan encompasses the area of the City generally bounded by the Royal and Grand Canals. The land within this area is developed and includes various brownfield sites.

Facilitating a transport system that is capable of accommodating a significant growth in the City's population would help to facilitate a higher efficiency of land utilisation in the City, thereby minimising land-take on greenfield lands beyond the City centre.

4.8.5 Green Infrastructure

There is a variety of green infrastructure throughout the Plan area. Parks and open space promote health and well-being, provide recreational facilities and a range of habitats for various species. Green infrastructure is also a crucial component in building resilient communities capable of adapting to the consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality.

4.8.6 Coastline

Management of Dublin's coastline and coastal erosion are topics with relevance to various environmental components. Coastlines can be amongst the most sensitive and valuable resources, in terms of natural and cultural heritage, scenic beauty and recreation. The coast is also an important economic resource - particularly for the fishing, aquaculture, leisure and tourism industries.

In 2013, the OPW completed the Irish Coastal Protection Strategy Study which provides a strategic assessment of the extent of coastal erosion and coastal flooding along the south-east coastline.

Coastal Vulnerability Index mapping is available from the GSI to evaluate impacts of sea-level rise. Vulnerability ranges from *very low* to *low* to *moderate* to *high* to *very high*. This dataset identifies areas along the Liffey in the east of the Plan area towards the coast as being of *low* to *very low* vulnerability to sea level rise. Eastern parts of the Plan area are identified by the OPW's National Coastal Flood Extents (2021) as being at elevated risk from coastal flooding – this risk is likely to increase as a result of climate change.

4.8.7 Minerals and Aggregates

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

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

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

4.8.8 Waste Management

Any construction waste arising from the development of infrastructure is required to be dealt with in compliance with relevant EU and National waste management policy, including that relating to the waste hierarchy of prevention, recycling, energy recovery and disposal.

For the purposes of waste management planning, Ireland is now divided into three regions: Southern, Eastern-Midlands and Connacht-Ulster. Waste management plans for each waste management region were published in 2015. Dublin City is located within the Eastern-Midlands region. The 2015 plans have been replaced by a new National Waste Management Plan for a Circular Economy, which takes account of the various measures outlined in *A Waste Action Plan for A Circular Economy - Ireland's National Waste Policy 2020-2025*.

4.8.9 Existing Problems

As the next tranche of public transport and active travel projects identified by the wider planning framework, including the City Development Plan and the Transport Strategy for the Greater Dublin Area, are brought forward for implementation, the issues of how to provide the physical space for this transport infrastructure as well as the additional people it will bring into the City Centre has become

the most urgent transport planning challenge facing the City.

4.9 Soil

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

Soils across the Plan area are urban soils that have been affected by human activities including development over many years.

To date, there is no legislation which is specific to the protection of soil resources. However, the EU Soil Strategy for 2030 sets out a framework and tangible measures to protect and restore soils, and seeks to ensure that they are used sustainably. It sets a vision and objectives to achieve healthy soils by 2050, with concrete actions by 2030, including a new legislative proposal for soil health.

Information sources relevant to the environmental component of soil which may be used in lower tier planning and environmental assessments includes:

- Soil types (2006) published by Teagasc, Geological Survey of Ireland (GSI), Forest Service & EPA;
- Soils and Subsoils Class (2006) published by Teagasc, GSI, Forest Service & EPA (2006);
- Sites of Geological Interest which have been published for some counties and provisional information on same for other counties (both available from GSI);
- Other datasets published by and available from GSI including those relating to Bedrock Geology, Quaternary Geology, Mineral deposits, Groundwater Resources and Landslides; and
- Datasets on contaminated soils which may be kept by planning authorities (these occur most often in urban areas).

4.9.1 County Geological Sites

Geological Survey Ireland coordinate the Irish Geological Heritage Programme, whereby an objective has been set to identify and select sites of geological interest within each county across the country. County Geological Sites (CGSs) do not receive statutory protection like Natural Heritage Areas but receive an effective protection from their inclusion in the planning system.

The audit of CGSs in Dublin City was completed in 2014, which identified 12 CGSs. There are nine designated CGSs occurring within/partially within the Plan area, as mapped on Figure 4.9 and listed below:

- DC001 – St. Stephen's Green;
- DC008 – Oscar Wilde Statue;
- DC006 – Museum Building – Trinity College;
- DC012 – Temple Bar Street Well;
- DC003 – General Post Office;
- DC011 – River Poddle;
- DC002 – Dublin City Walls;
- DC005 – Guinness Wells; and
- DC009 – Phoenix Park.

4.9.2 Landslides

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

The GSI have classified the Plan area as having relatively low levels of landslide susceptibility (as shown on Figure 4.10) with no history of landslide events.[56]

4.9.3 Existing Problems

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

[56] Over 2,500 landslide events are recorded in the National Landslides Database available from GSI (www.gsi.ie). This dataset also includes Landslide Susceptibility Mapping to assist in the identification of areas that are likely to experience landsliding.

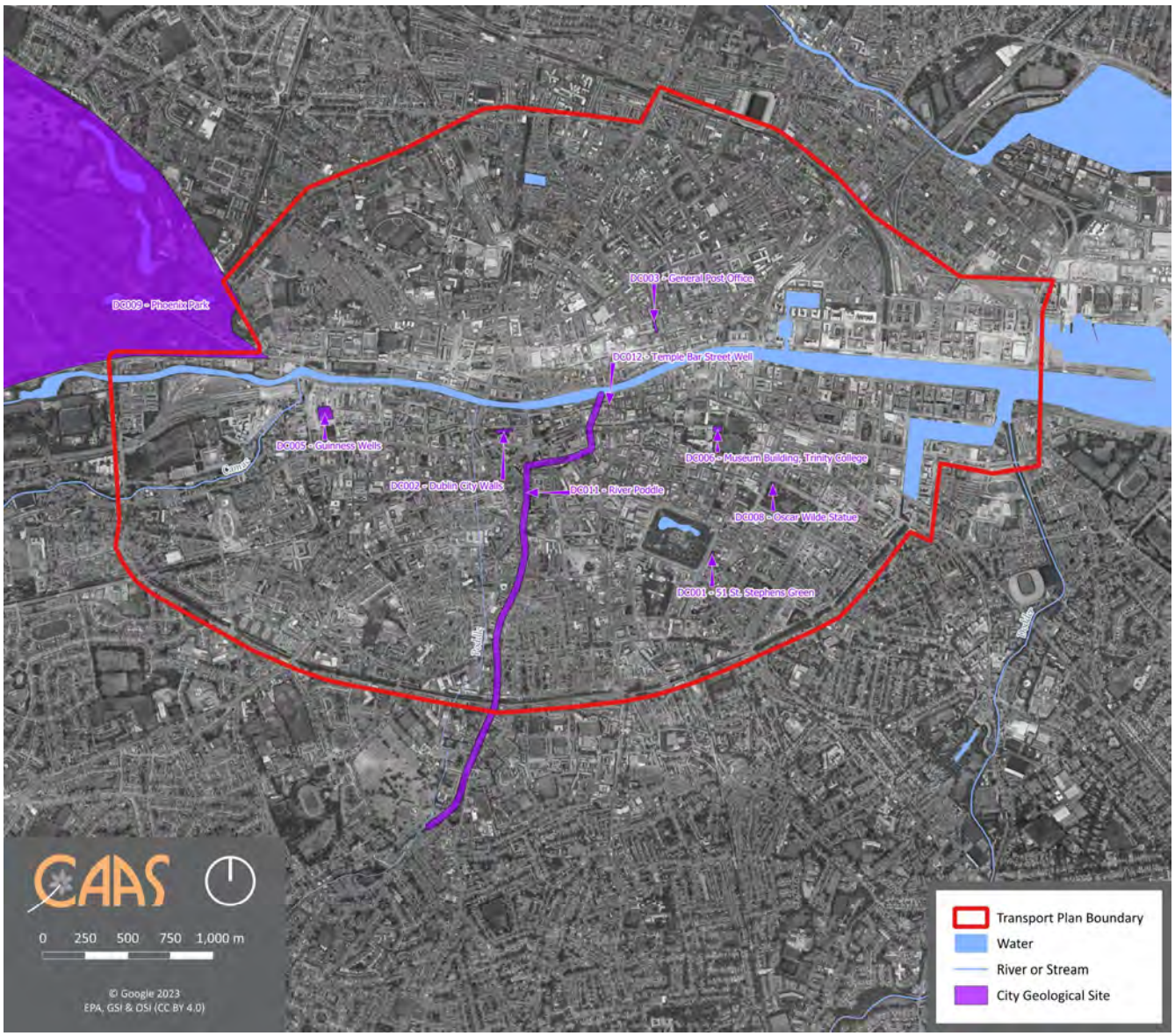

Figure 4.9 City Geological Sites

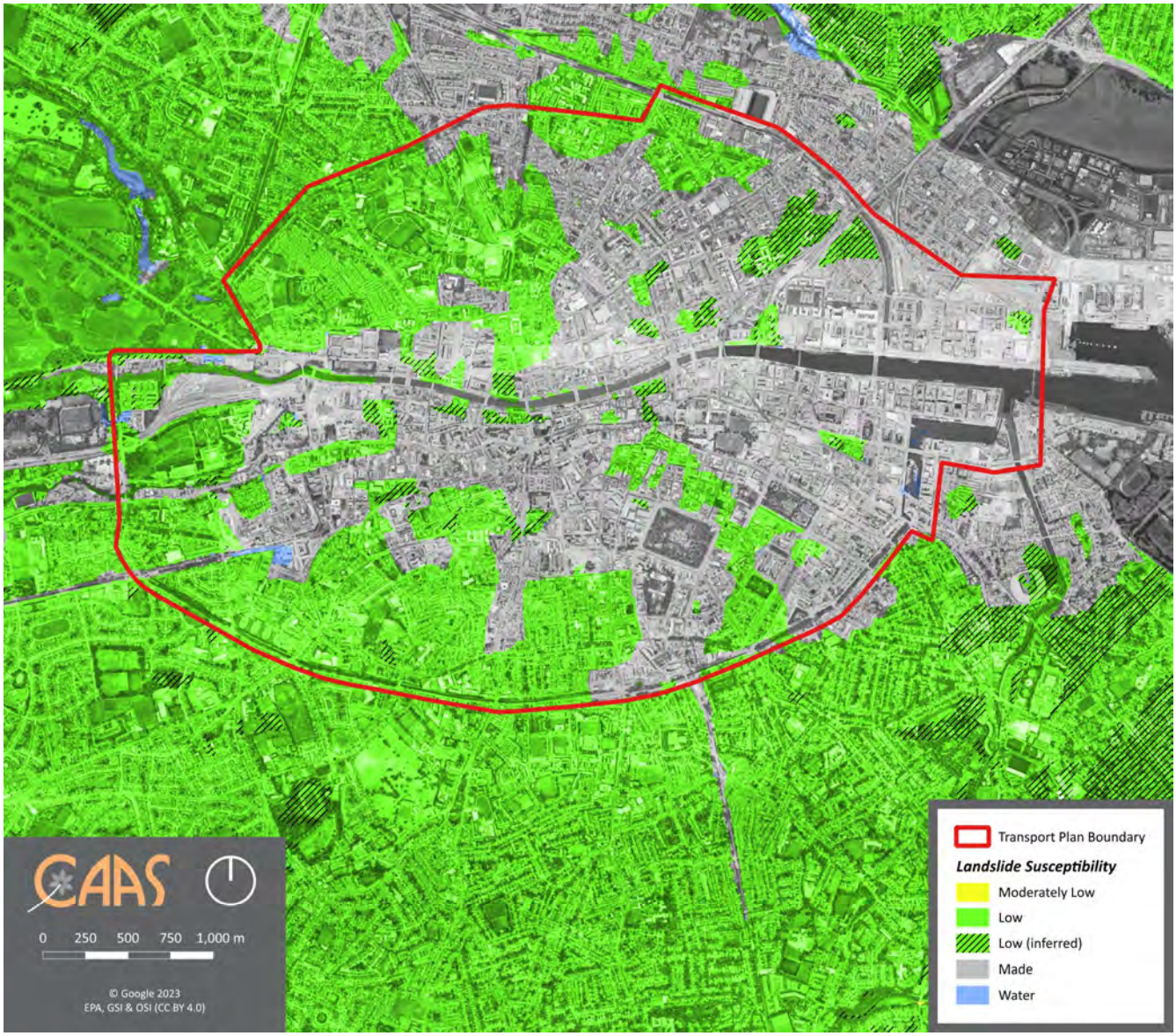

Figure 4.10 Landslide Susceptibility

4.10 Water

4.10.1 The Water Framework Directive

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

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

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

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

4.10.2 Zone of Influence

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

4.10.3 Surface Water Drainage

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

4.10.4 Surface Water Status

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

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

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

The current WFD (2016-2021) status[57] of various sections of the river waterbodies draining the Plan area is:

- *Good* (identified by the EPA as 'Royal Canal main Line - Liffey and Dublin Bay' and 'Grand Canal Basin – Liffey and Dublin Bay');
- *Moderate* (identified by the EPA as 'Dodder_050'); and
- *Poor* (identified by the PA as 'Camac_040' and 'Poddle_010').

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

The WFD surface water status (2016-2021) of coastal and transitional waterbodies within and surrounding the Plan area is identified as *good* (Liffey Estuary Upper) and *moderate* (Liffey Estuary Lower).

Figure 4.11 illustrates the WFD surface water status within and surrounding the Plan area. The River Camac and River Poddle are currently identified in the combined 2016-2021 data as being at risk of not meeting the WFD's objectives due to the damage being caused by significant pressures related to[58]:

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

4.10.5 Ground Water

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

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

The WFD status (2016-2021) of all groundwater underlying the Plan area (shown on Figure 4.12) is currently identified as being of *good status*, meeting the objectives of the WFD.

4.10.6 Aquifer Vulnerability and Productivity

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

Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The vulnerability of aquifers underlying the Plan area are mapped on Figure 4.13 and are classified as being of generally 'low vulnerability' within the northern parts of the Plan area and generally 'moderate vulnerability' (with pocket areas of 'high' and 'extreme') within the southern parts of the Plan area.

The GSI also rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. This is referred to as aquifer productivity and is mapped on Figure 4.14. Productivity within the Plan area is generally classified as being a 'Locally Important Aquifer Bedrock, which is moderately productive only in local zones'.

4.10.7 WFD Registers of Protected Areas

The WFD requires that Registers of Protected Areas (RPAs) are compiled for a number of water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species e.g.

[58] https://gis.epa.ie/EPAMaps/Water

Salmonid areas; Special Areas of Conservation (SACs); and Special Protection Areas (SPAs). Also refer to Section 4.7.2.1.

The River Liffey, a number of its tributaries and coastal areas of the Dublin Bay are identified on the RPA for 'Nutrient Sensitive Areas' and 'Surface Waters in Nutrient Sensitive Areas'[59] (as shown on Figure 4.15). The groundwater underlying the Plan and surrounding areas are used for drinking water abstraction in accordance with European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278/2007) and are identified on the RPAs for 'Drinking Water Ground Water' (shown on Figure 4.16) and RPAs for 'Groundwater in Nutrient Sensitive Areas'[60] (shown on Figure 4.15).

4.10.8 Flooding

Flooding is an environmental phenomenon which, as well as causing economic and social impacts, could in certain circumstances pose a risk to human health. The existence of flood risk across the country is illustrated by various sources of information on historical flooding events – including those available from the Office of Public Works, the lead Authority on flooding in the country, the National Flood Hazard Mapping website[61]. In addition to this historic mapping there is predictive, modelled Preliminary Flood Risk Assessment and Flood Risk and Hazard mapping available from the OPW including through the National Catchment Flood Risk Management Programme. Historical and predictive flood risk indicators are also available from Geological Survey of Ireland. These mapping sources identify flood risk from various sources, including fluvial, pluvial, coastal and groundwater.

Eastern parts of the Plan area are identified as being at elevated risk from coastal flooding (as identified by the OPW's National Coastal Flood Extents mapping) and lands along the Plan area's various streams and rivers are identified as being at elevated risk from coastal flooding (as identified by the OPW's CFRAMS Flood Extent mapping) – such risk is likely to increase as a result of climate change.

The City Development Plan provides for land use zoning across the Transport Plan area and has been informed by a Strategic Flood Risk Assessment (SFRA). The SFRA has facilitated the integration of flood risk management measures into the Plan with which development proposals must comply. The Transport Plan is consistent with the provisions of the City Development Plan, including land use zoning, and any proposals emanating will need to comply with relevant flood risk management requirements.

4.10.9 Existing Problems

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

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

[59] Areas designated as sensitive under the Urban Wastewater Treatment Directive (91/271/EEC) and and transposing Regulations.
[60] Groundwater bodies that intersect with areas designated as sensitive under the Urban Wastewater Treatment Directive (91/271/EEC) and transposing Regulations.
[61] https://www.floodinfo.ie/

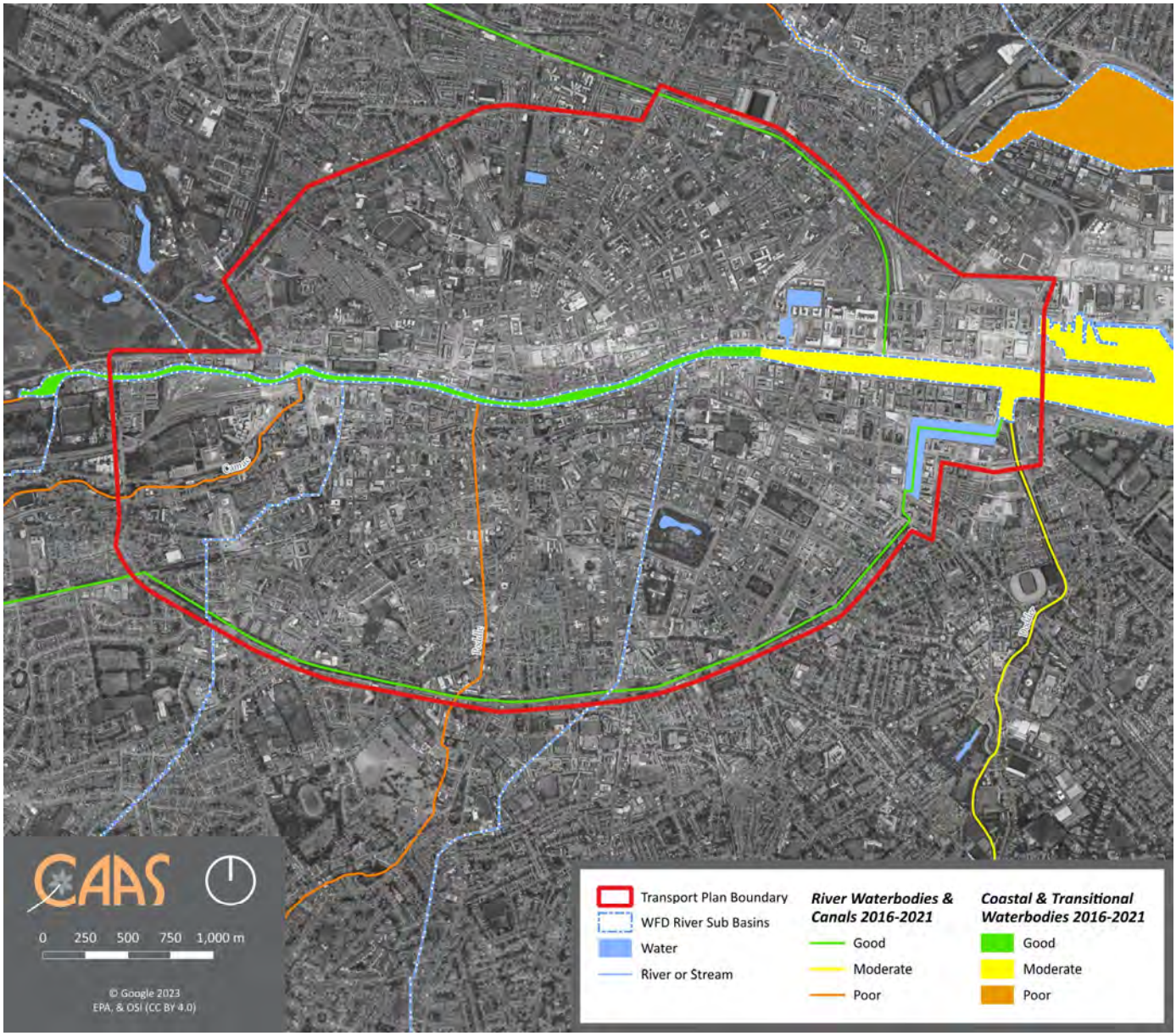

Figure 4.11 WFD Surface Water Status (2016-2021)

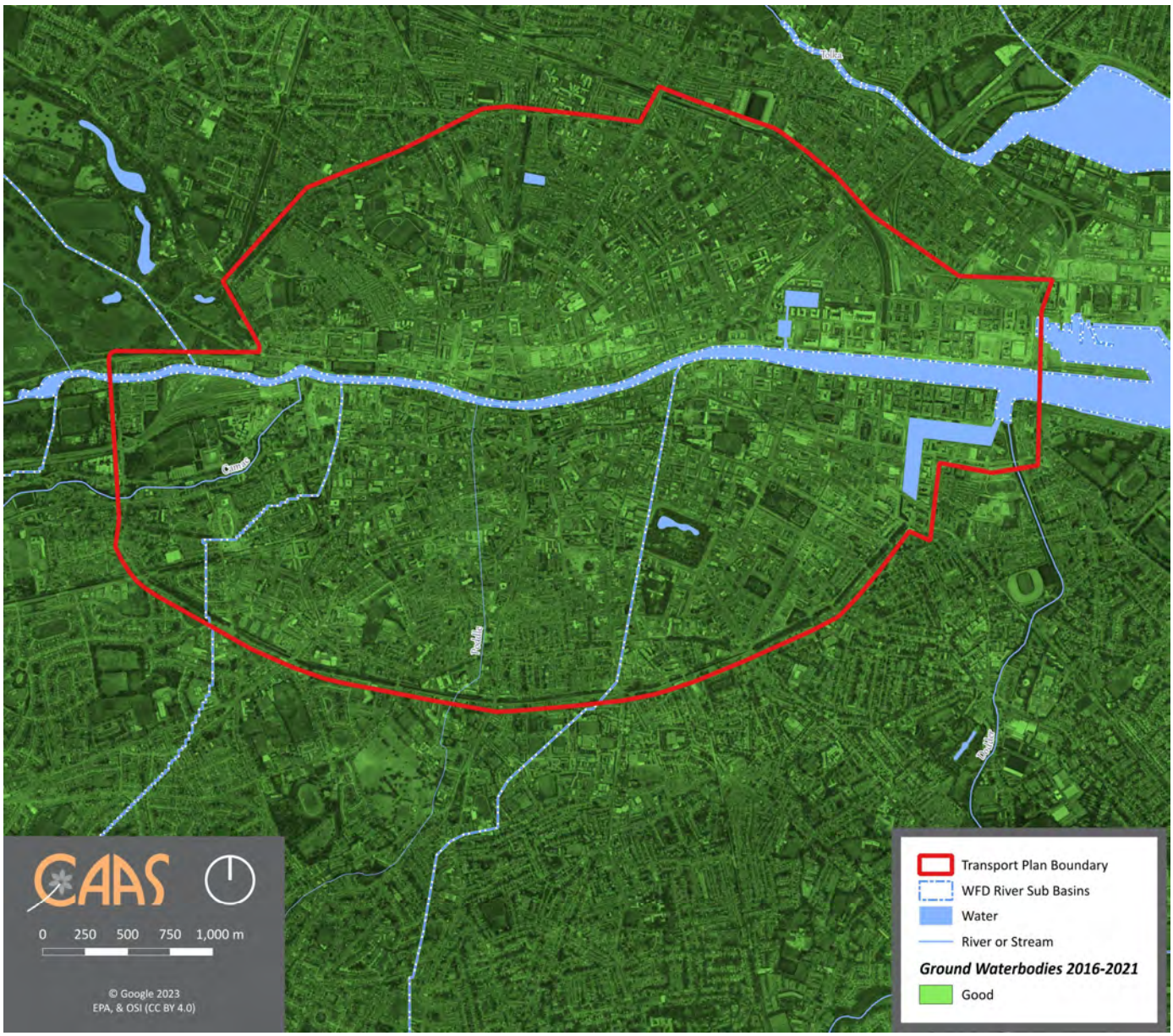

Figure 4.12 WFD Groundwater Status (2016-2021)

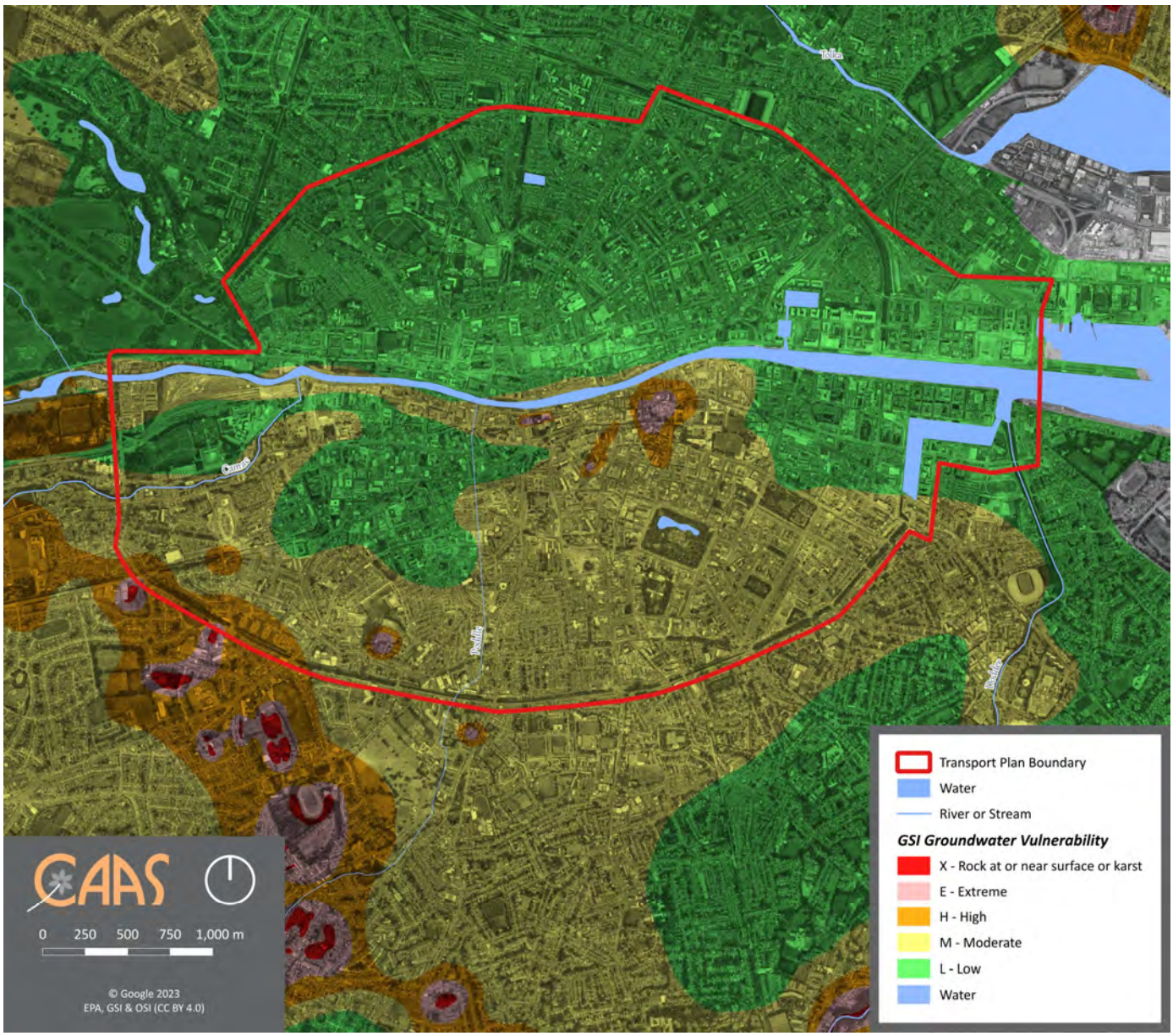

Figure 4.13 Groundwater Vulnerability

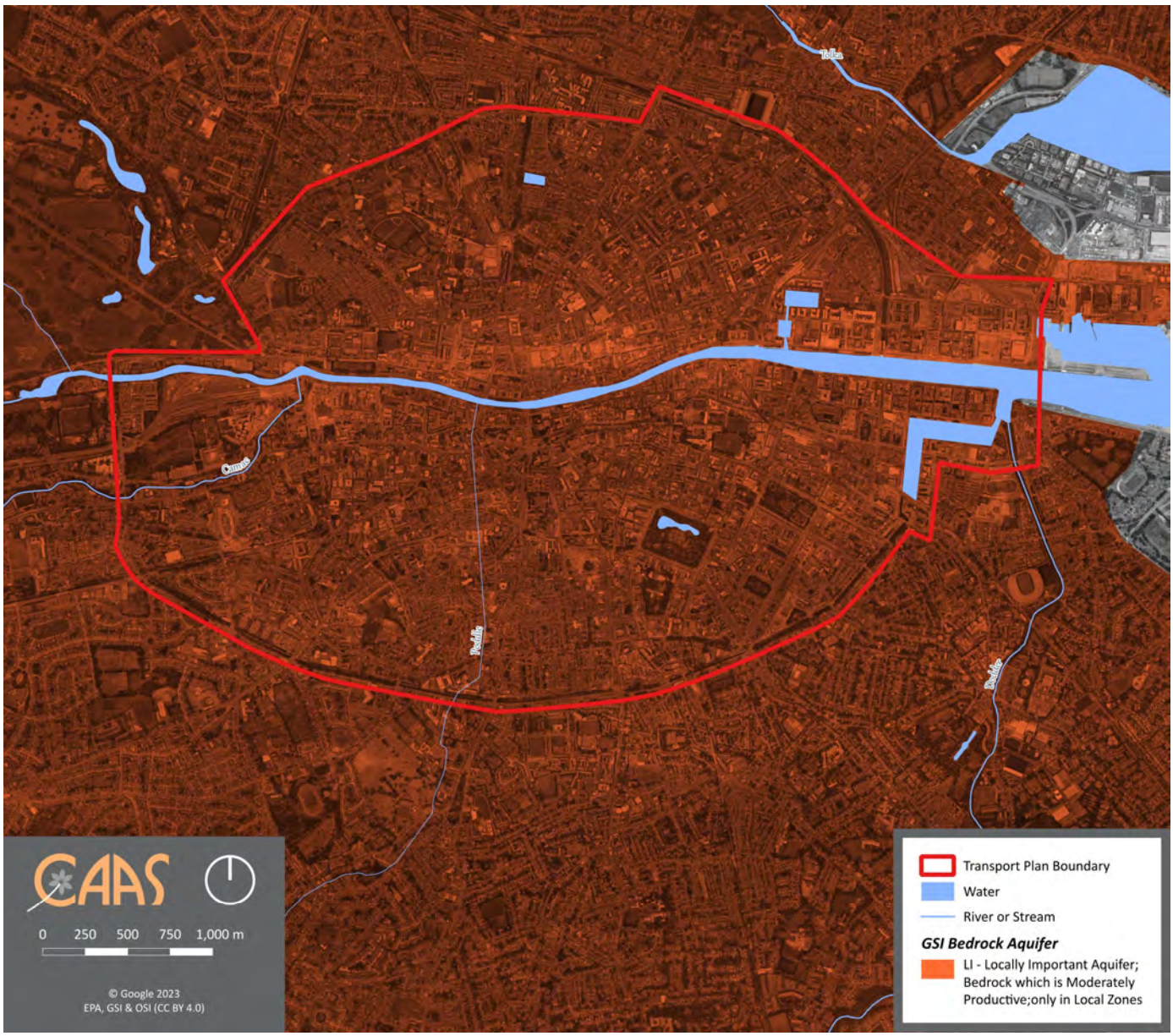

Figure 4.14 Groundwater Productivity

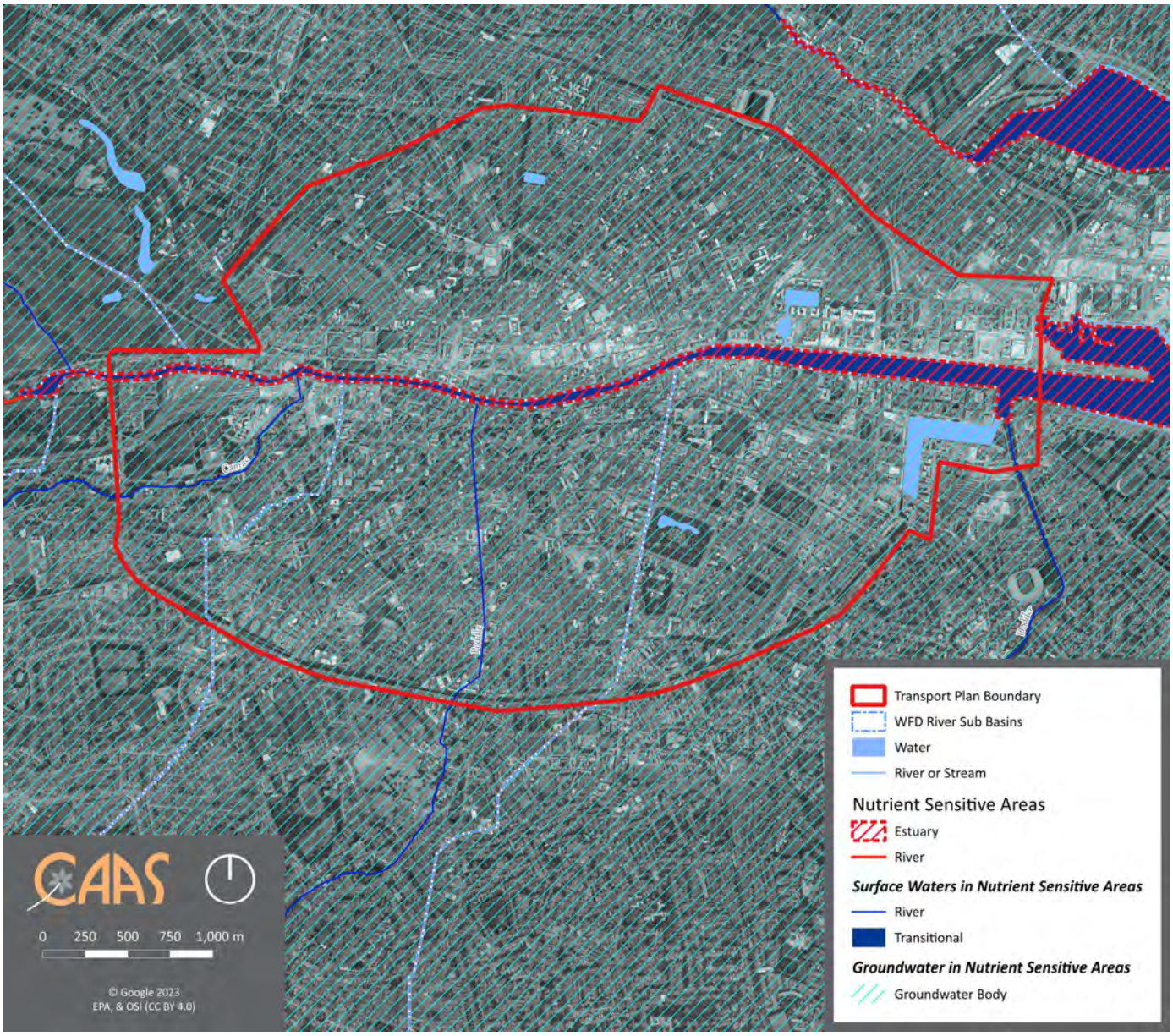

Figure 4.15 WFD RPA Nutrient Sensitive Areas

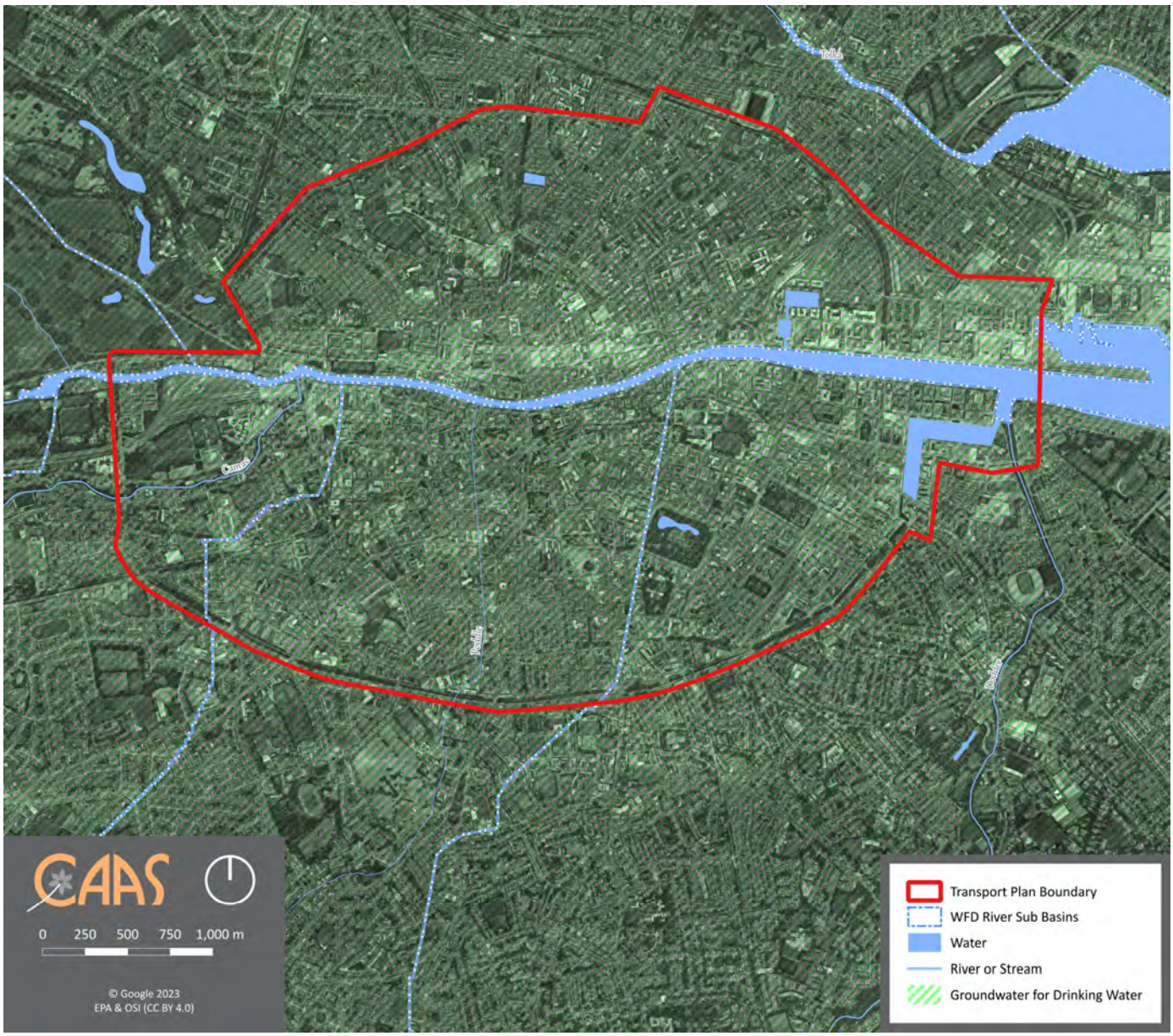

Figure 4.16 WFD RPA Drinking Water

4.11 Landscape

4.11.1 Introduction

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

The landscape of the Plan area is characterised by its predominantly urban character, which encompasses individual buildings, streets, urban spaces, neighbourhoods and landscapes. The unique historical character of the City Centre ranges from 'old' medieval origins and the Georgian squares and streets to the new, modern and contemporary built environment, such as the area of the Docklands.

The River Liffey intersects the central parts of the Plan area. Dublin City Centre's rivers and canals with their riparian zones form important elements of the green infrastructure network, facilitating wildlife corridors and aquatic habitats, floodplains, green spaces, cultural setting, water-focused amenity, sports and riverside cycle and walkways.

4.11.2 Designations

The importance of landscape and visual amenity and the role of its protection are recognised in the Planning and Development Act 2000 as amended, which requires that Development Plans include objectives for the preservation of the landscape, views and the amenities of places and features of natural beauty. These objectives and associated plan content often designate different aspects of the landscape. Such designations, which vary from local authority to local authority and change over time, should be taken into account by lower tier planning and environmental assessments.

The following landscape designations and sensitivities have been designated by the Dublin City Development Plan 2022-2028:

- Parks and Open Spaces[62];
- Tree Preservation Orders[63];
- Special Amenity Area Order sites[64]; and
- Key views and prospects for Dublin City[65].

4.11.3 Existing Environmental Problems

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

[62] Parks are key areas for biodiversity across the city and provide multiple habitats for legally protected, and rare as well as common species.

[63] TPOs are a planning mechanism whereby individual trees or groups of trees can be identified as important and protected by a TPO. There is one within the Plan area with trees protected by the Order – at St. Patrick's House in Kilmainham. Refer to City Development Plan Figure 4-1.

[64] The purpose of these Orders is to preserve/enhance landscape character and to prevent/limit development. Such areas should also be taken into account by lower tier planning and environmental assessments where/if relevant. The closest designated SAAOs to the Plan area are the Liffey Valley to the west of the Plan area and the North Bull Island to the north-east of the Plan area.

[65] There are Views of Landmarks designated within the Plan area including those of Hueston Station, Collins Barracks, Four Courts, Christ Church Cathedral, St. Patrick's Cathedral, City Hall, Dublin Castle, Spire, Parnell Square, St. Stephen's Green, Merrion Square, Trinity College, Custom House, River Liffey and St. Stephen's Church. Refer to City Development Plan Figure 10-4.

4.12 Cultural Heritage

4.12.1 Archaeological Heritage

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

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

As identified in the City Development Plan, Dublin City has a rich archaeological heritage. It has a recorded history of human settlement of over 9,000 years, centred along the line of the River Liffey. There are significant upstanding monuments of archaeological interest across the city centre including the ancient city walls, castles, churches and graveyards, and the River Liffey's quay walls. As with other European capital cities, Dublin also has important subsurface archaeological remains that represent the history of the development of the city from its origins through the medieval period right up to modern times. Mesolithic fish traps were excavated at Spencer Dock, while an exceptionally well-preserved Viking town was uncovered at Wood Quay. The industrial heritage of the City c.1750-1950 survives in areas such as St. James's Gate.

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

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

The term 'monument' includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. All monuments in existence before 1700 A.D. are automatically considered to be historic monuments within the meaning of the Acts. Monuments of architectural and historical interest also come within the scope of the Acts. Monuments include: any artificial or partly artificial building, structure or erection or group of such buildings, structures or erections; any cave, stone or other natural product, whether or not forming part of the ground, that has been artificially carved, sculptured or worked upon or which (where it does not form part of the place where it is) appears to have been purposely put or arranged in position; any, or any part of any, prehistoric or ancient tomb, grave or burial deposit, or, ritual, industrial or habitation site; and any place comprising the remains or traces of any such building, structure or erection, any such cave, stone or natural product or any such tomb, grave, burial deposit or ritual, industrial or habitation site, situated on land or in the territorial waters of the State', but excludes 'any building or part of any building, that is habitually used for ecclesiastical purposes' (National Monuments Acts 1930-2004).

A recorded monument is a monument included in the list and marked on the map which comprises the RMP set out county by county under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Notification within which requirements for notifications of proposed works apply.

A Sites and Monuments Record (SMR)[66] is a manual containing a numbered list, accompanied by a map, of all certain and possible monuments in an area and. An Urban Archaeology Survey was completed in 1995 and contained reports on historic towns dating to before 1700 A.D. with a view to delineating zones of archaeological potential (SMR Zones of Notification). The SMR formed the basis for issuing the RMP.

[66] The RMP was issued for each county between 1995 and 1998 in a similar format to the existing SMR. However, the RMP differs from the earlier lists in that, as defined in the Act, only monuments with known locations or places where there are believed to be monuments are included. The large archive and supporting database are managed by the National Monuments Service and the records are continually updated and supplemented as additional monuments are discovered. (https://data.gov.ie/dataset/national-monuments-service-archaeological-survey-of-ireland).

Figure 4.17 shows the spatial distribution of recorded monuments within the Plan area and beyond. There are hundreds of Recorded Monuments (including several Monuments in State Care) within the Plan area, concentrated around the Inner City Centre Core area (as shown on Figure 4.17).

The Underwater Archaeology Unit was established within the National Monuments Service to manage and protect Ireland's underwater cultural heritage, including the quantification of the underwater resource and assessing development impacts in order to manage and protect this aspect of Ireland's heritage. The Shipwreck Inventory is principally a desktop survey with information gathered from a broad range of cartographic, archaeological and historical sources, both documentary and pictorial. Wrecks over 100 years old and archaeological objects found underwater are protected under the National Monuments (Amendment) Acts 1987 and 1994. Significant wrecks less than 100 years old can be designated by Underwater Heritage Order on account of their historical, archaeological or artistic importance. Such Orders can also be used to designate areas of seabed or land covered by water to more clearly define and protect wreck sites and archaeological objects. Under the legislation all diving on known protected wreck sites or with the intention of searching for underwater cultural heritage is subject to licensing requirements.

Rivers, estuaries and marine and coastal areas within and adjacent to the Plan area may contain many features and finds associated with riverine heritage such as shipwrecks, piers, quay walls, fords, stepping stones and associated archaeological objects and features. There are over 600 shipwrecks recorded in Dublin Bay and the River Liffey. Many additional wrecks whose precise location is unknown, are also likely to be present.

4.12.2 Architectural Heritage

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

Records of Protected Structures are legislated for under Section 12 and Section 51 of the Planning and Development Act 2000 as amended. Protected Structures are defined in the Planning and Development Act 2000 as amended as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view. Entries from the Records of Protected Structures are identified in the relevant planning authority Development Plan and at https://www.myplan.ie/.

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

(i) The interior of the structure;
(ii) The land lying within the curtilage[67] of the structure;
(iii) Any other structures lying within that curtilage and their interiors; and,
(iv) All fixtures and features which form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii).

In addition to Protected Structures, the Planning and Development Act, 2000 provides the legislative basis for the protection of Architectural Conservation Areas (ACAs). An ACA is a place, area or group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA which might alter the character of the structure or the ACA. Dublin City currently has 24 Architectural Conservation Areas, many of which are located within the Plan area.

The National Inventory of Architectural Heritage (NIAH) is a State initiative under the administration of the Department of Housing, Local Government and Heritage and was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments

[67] Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

(Miscellaneous Provisions) Act 1999. The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister of Culture, Heritage and the Gaeltacht to the local authorities for the inclusion of particular structures in their Record of Protected Structures. The NIAH includes historic gardens and designed landscapes.

Figure 4.18 shows entries to NIAH within the Plan area and beyond. Similar to the general spatial spread of monuments, these are concentrated around the Inner City Centre Core area as well as lining the City's older streets and squares.

The City's architectural assets, in addition to the entries to the RPS and NIAH and ACAs, include conservation areas (designated with land use zonings[68]), mews structures, vernacular buildings, 20th century heritage, industrial heritage and street furniture, which may not be protected structures but which contribute significantly to the streetscape and to the character of the City.

4.12.3 Existing Problems

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

[68] The "Z8 Georgian Conservation Areas", "Z2 Residential Conservation Areas" and red-lined "Conservation Areas" are extensive throughout the city. Whilst these areas do not have a statutory basis in the same manner as protected structures or ACAs, they are recognised as areas that have conservation merit and importance and warrant protection through zoning and policy application.

Designated Conservation Areas include extensive groupings of buildings, streetscapes and associated open spaces and include (parts of) the medieval/walled city, the Georgian Core, the 19th and 20th century city, and the city quays, rivers and canals. The special interest/value of Conservation Areas lies in the historic and architectural interest and the design and scale of these areas. Therefore, all of these areas require special care in terms of development proposals. The City Council will encourage development that enhances the setting and character of Conservation Areas.

As with Architectural Conservation Areas, there is a general presumption against development which would involve the loss of a building of conservation or historic merit within the Conservation Areas or that contributes to the overall setting, character and streetscape of the Conservation Area. Such proposals will require detailed justification from a viability, heritage, and sustainability perspective.

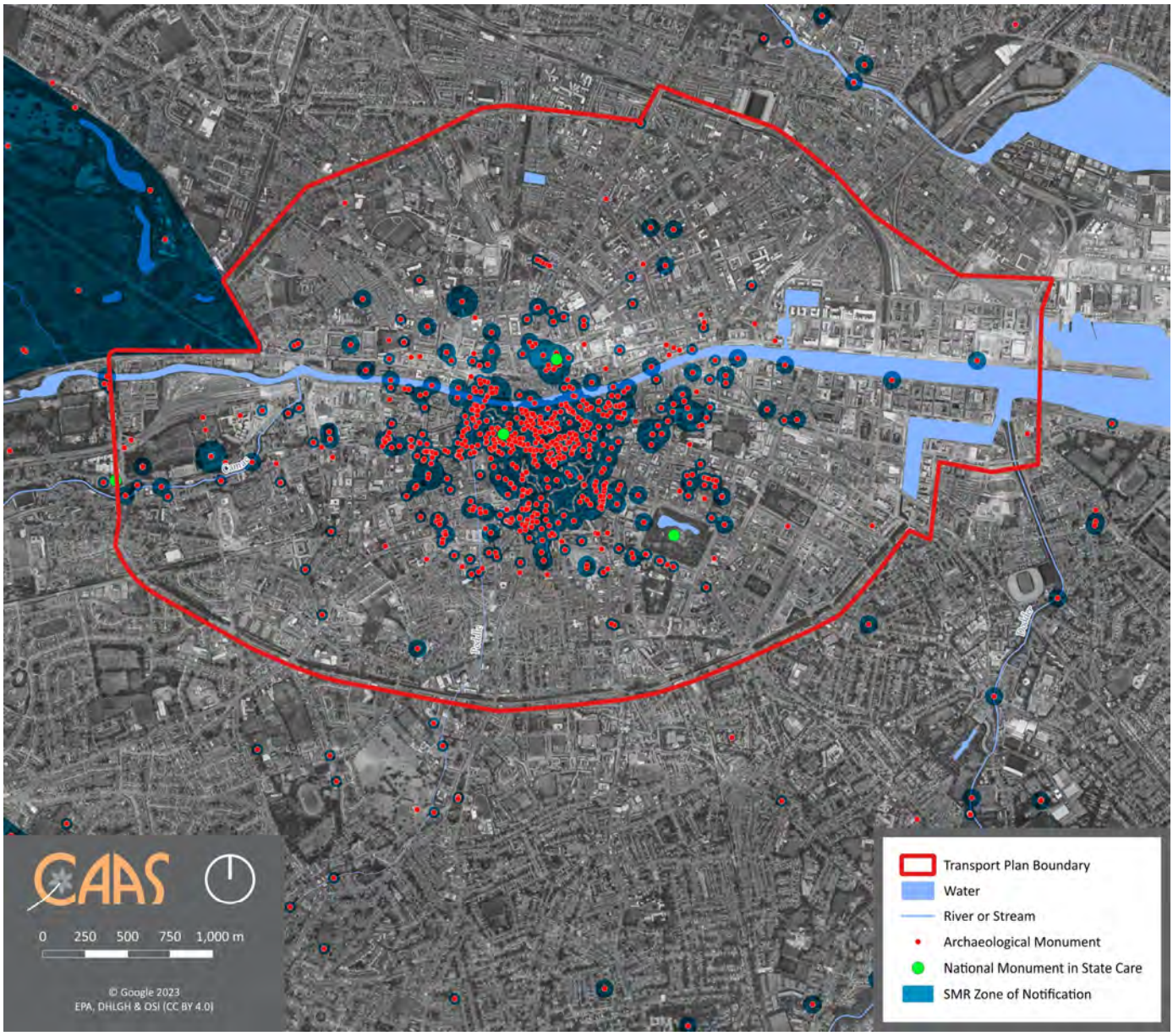

Figure 4.17 Archaeological Heritage

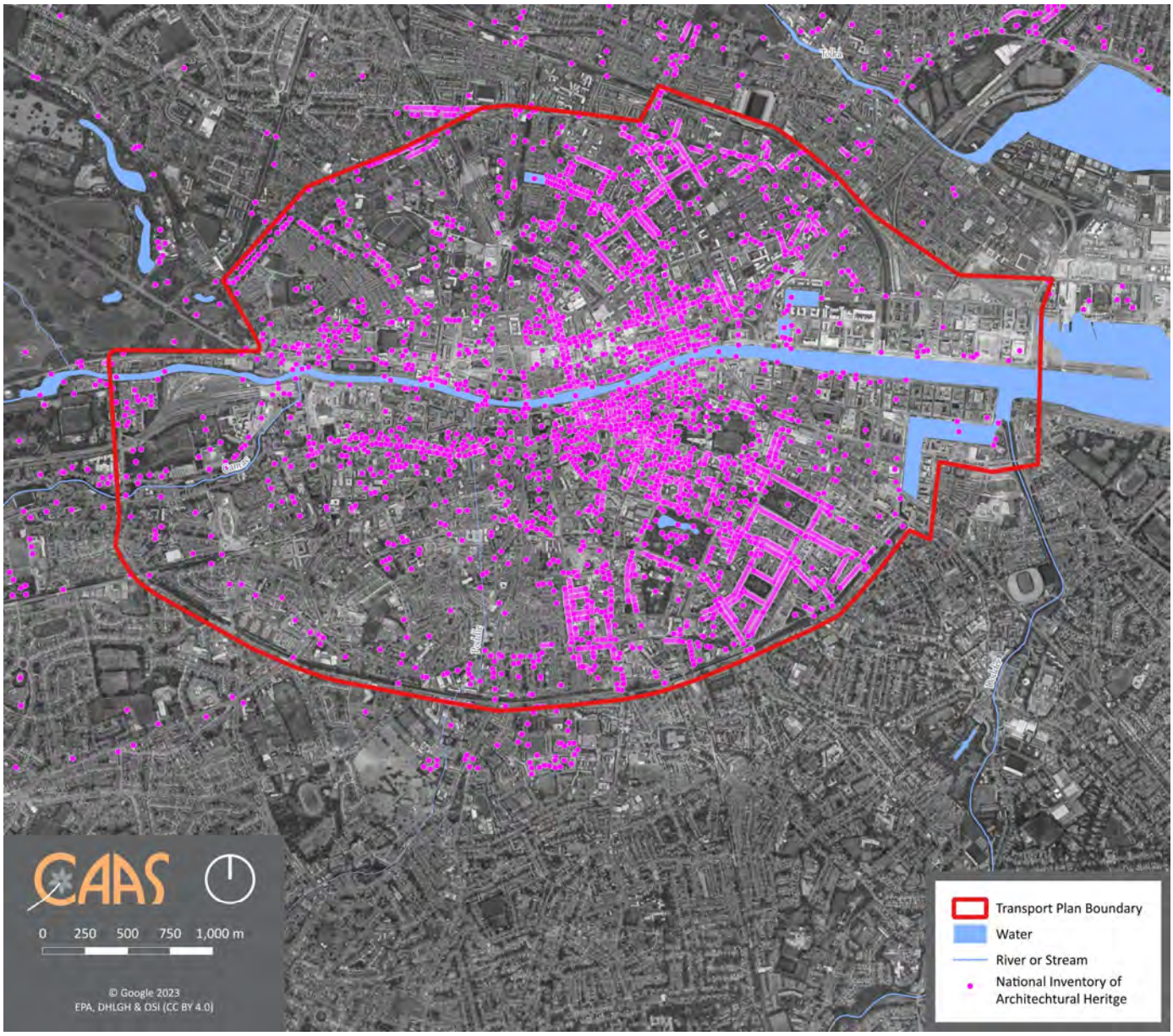

Figure 4.18 Architectural Heritage

Section 5 Strategic Environmental Objectives

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

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

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

Monitoring measures chosen for the SEA of the Plan align with those used in the SEA of the Transport Strategy for the Greater Dublin Area and in the SEA of the Dublin City Development Plan. This consistency across the hierarchy of land use/transport planning will improve the efficiency and effectiveness of future monitoring.

All SEOs, indicators and targets are provided on Table 5.1 overleaf. Further detail on legislation, plans and programmes are provided under Section 2 (and associated Appendix I ‘‘Relationship with Legislation and Other Plans and Programmes’’) and Section 4.

Table 5.1 Strategic Environmental Objectives, Indicators and Targets

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Air	**A**	Support clean air policies that reduce the impact of air pollution on the environment and public health	• To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from transport • Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency • Promote continuing improvement in air quality • Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution • Meet Air Quality Directive standards for the protection of human health — Air Quality Directive • Significantly decrease noise pollution and move closer to WHO recommended levels	• Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels • NO_x, SO_x, PM_{10} and $PM_{2.5}$ as part of Ambient Air Quality Monitoring	• Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels • Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter
Climatic Factors[69]	**C**	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	• To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into infrastructure • Contribute towards the reduction of greenhouse gas emissions in line with national targets • Promote development resilient to the effects of climate change • Promote the use of renewable energy, energy efficient development and increased use of public transport	• Implementation of the Plan, which will contribute towards and facilitate climate action • Carbon dioxide (CO_2) emissions	• To implement the Plan, which will contribute towards and facilitate climate action • To demonstrate successful implementation of measures relating to climate reduction targets – including the legally binding targets of the Climate Action and Low Carbon Development Act 2015, as amended, for Ireland to reach a target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels).
				• A competitive, low-carbon, climate-resilient and environmentally sustainable economy	• Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050
				• Share of renewable energy in transport	• Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan
				• Energy consumption, the uptake of renewable options and solid fuels for residential heating	• To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating
				• Proportion of journeys made by private fossil fuel-based car compared to previous levels	• Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels
				• Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	• Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures

[69] Please also refer to relevant legislation and requirements under Section 4.5, Section 8, Section 9 and Appendix I.

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Population and Human Health	**PHH**	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	• Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management • Ensure that existing population and planned growth is matched with the required public infrastructure and the required services • Safeguard citizens from environment-related pressures and risks to health and well-being	• Implementation of the Plan, which will contribute towards and facilitate economic growth	• To implement the Plan, which will contribute towards and facilitate economic growth
				• Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan	• No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan
				• Proportion of people reporting regular cycling / walking to school and work above previous CSO figures • Access to sustainable modes of transport	• Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures • To improve access to sustainable modes of transport
Biodiversity, Flora and Fauna	**BFF**	No net contribution to biodiversity losses or deterioration	• To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species • Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function • Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species • Enhance biodiversity in line with the National Biodiversity Strategy and its targets • To protect, maintain and conserve natural capital	• Condition of European sites	• Relevant projects to integrate considerations relating to European sites, other nature conservation sites, ecological networks, protected species and ecosystem services • Relevant projects to have regard to the heritage and biodiversity plans of planning authorities
				• Number of projects that have integrated ecosystem services considerations	• Relevant projects to integrate considerations relating to ecosystem services
				• EIAs and AAs as relevant for new projects	• Screen for and undertake EIA and AA as relevant for new projects
				• Compliance of planning permissions with Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 21 of the Plan	• For new projects only to be progressed where they demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 21 of the Plan
Material Assets	**MA**	Sustainable and efficient use of natural resources	• Optimise existing infrastructure and provide new infrastructure to match population distribution proposals • Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes	• See also indicator relating to the existing built-up footprint of the City under Soil • Proportion of people reporting regular cycling / walking to school and work above previous CSO figures • Access to sustainable modes of transport	• See also target relating to the existing built-up footprint of the City under Soil • Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures • To improve access to sustainable modes of transport
Soil (and Land)	**S**	Ensure the long-term sustainable management of land	• Protect soils against pollution, and prevent degradation of the soil resource • Promote the sustainable use of infill and brownfield sites over the use of greenfield • Safeguard areas of prime agricultural land and designated geological sites	• To facilitate population growth occurring within the existing built-up footprint of the City (also relevant to Material Assets) • Instances where contaminated material generated from brownfield and infill must be disposed of	• To facilitate compliance with growth targets for delivery of housing within the existing built-up footprint of the City • Dispose of contaminated material in compliance with EPA guidance and waste management requirements

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives	Indicators	Targets
Water	**W**	Protection, improvement and sustainable management of the water resource	• Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive • Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas • Integrate sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects	• Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD • Number of incompatible developments permitted within flood risk areas • Integration of sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects	• Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' • Implementation of the objectives of the River Basin Management Plan • Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk • Integrate sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects as relevant
Landscape	**L**	Protect and enhance the landscape character	• To implement the identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention	• Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in the City Development Plan, resulting from development which is granted permission under the Plan	• No schemes progressed that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in the City Development Plan, resulting from development which is granted permission under the Plan
Cultural Heritage	**CH**	Safeguard cultural heritage features and their settings through responsible design and positioning of development	• Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage	• Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan	• Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan
				• Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	• Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan

Section 6 Description of Alternatives

6.1 Need for the Plan

In 2016, Dublin City Council, in conjunction with the National Transport Authority (NTA), published the Dublin City Centre Transport Study, which set out a framework for the managed implementation of transport projects across Dublin City Centre in line with the vision and objectives of the Dublin City Development Plan and the NTA's Transport Strategy for the Greater Dublin Area 2016-2035.

The current Dublin City Development Plan (2022- 2028) has encompassed the framework set out in the previous study, but the new policies and objectives of the Development Plan have required a corresponding update of the 2016 City Centre Transport Study. In line with this, the Development Plan Objective SMT05 requires Dublin City Council: "To review the City Centre Transport Plan 2016 in collaboration with the NTA in the lifetime of the plan, setting out a clear strategy to prioritise active travel modes and public transport use, whilst ensuring the integration of high quality public realm."

6.2 Provisions already in place and limitations to alternatives

The alternatives available for the Plan are considerably limited by the provisions of the wider planning framework. The Plan aligns with legislation and documents setting out public policy for land use, transport and climate action and will be incorporated into the review and preparation of these documents. These include the National Planning Framework (and associated National Development Plan), the Strategic Investment Framework for Land Transport, the National Investment Framework for Transport in Ireland, the National Climate Action Plan 2023 and emerging Climate Action Plan 2024, the Regional Economic and Spatial Strategy for the Eastern and Midland Region and associated Dublin Metropolitan Area Strategic Plan, the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area.

The provisions of the Dublin City Development Plan give clear direction in terms of land use development and management of all transport modes in the City Centre. Notably, there is clear direction from the Development Plan that vehicular traffic in the City Centre needs to be managed. This is accompanied by a renewed emphasis on the need to better provide for higher capacity sustainable modes of travel, active travel and to more efficiently service the diversity of business, commercial and cultural activities within the city.

The Development Plan includes mode share targets for travel into Dublin City Centre. These targets are based on the Canal Cordon Counts undertaken every year and relate to travel into the centre during the peak 3-hour morning period. The largest change required to the Canal Cordon mode share targets for 2028, as set out in the Development Plan, is in the Car/Taxis/Goods category where a 40% reduction in the existing mode share level is targeted in the Development Plan, with the reduction falling mainly on the private car as the demand for taxis and goods is likely to grow over the next number of years. The achievement of these targets will require a reorientation of the City Centre's streets towards sustainable modes of transport.

The Transport Strategy for the Greater Dublin Area makes provision for infrastructure and services (including the Greater Dublin Area Cycle Network, the Core Bus Corridor Programme, the New Dublin Area Bus Service Network, the MetroLink and DART+) in order to facilitate greater numbers of people travelling into the City Centre by sustainable modes of transport. By 2030, the combination of major transport projects will facilitate a significant increase in the number of people travelling into the City Centre every day by public transport. The BusConnects service changes will increase capacity across the Metropolitan Area by approximately 25%, with the City Centre remaining the focus of this network. DART+ West will increase capacity from 5,000 passengers per hour to 13,500 and DART+ South West from 5,000 to 20,000.

While the concentration of public transport investment in the city centre is welcome, these schemes, along with numerous active travel

projects, present considerable challenges to ensure that high frequency and high-capacity public transport services can operate efficiently. They also present a real opportunity for the city to be transformed and to realise the vision as set out by the elected members in the City Development Plan. The scale and nature of all of these projects, however, cannot be accommodated within the existing road network without radical changes in how the general traffic network operates within the Inner Core.

6.3 Alternatives Considered

Taking into account the objectives and geographical scope of the Plan, as outlined above and in Section 2 of this SEA Environmental Report, alternatives were considered under two tiers as follows:

6.3.1 Tier 1 Alternatives: Overall Approach

Alternative A - Congestion Charging

As a means of reducing the number of cars driving in Dublin City Centre, the introduction of a zone within which motorists would be required to pay a charge to drive.

The zone could encompass the Inner Core or the Study Area as a whole and would be monitored and enforced by means of cameras. The cost of the scheme would be subject to detailed analysis but would be set at a rate to discourage driving.

Specific arrangements would be considered for blue badge holders as would reduced rates for Low and Zero Emissions vehicles.

Alternative B - Traffic Management

As a means of reducing the number of cars driving in Dublin City Centre, introduce a number of traffic management interventions that would reduce the potential for vehicles to travel through the Inner Core, but would facilitate travel into the area, and access to car parks.

6.3.2 Tier 2 Alternatives: Traffic Management

Alternative A - Urban Design/ Planting / Amenity/ Plaza

This approach would provide for the traffic management measures to reduce through traffic alongside significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc.

It would capitalise on the opportunities provided by the traffic management interventions to deliver a more attractive City Centre.

Alternative B – Minimalist traffic management measures only

This approach would provide for the traffic management measures only and would effectively leave the traffic-free streets and spaces as they are today.

Section 7 Evaluation of Alternatives

7.1 Introduction

This section provides a comparative evaluation of the environmental effects of implementing the alternatives that are detailed under Section 6. This determination sought to understand whether each alternative was likely to improve, conflict with or have a neutral interaction with environmental components.

7.2 Methodology

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

A strategic multi-criteria analysis under the headings of Economy, Safety, Integration, Accessibility and Social Inclusion and Environment is also used.

The degree of significance of effects occurring cannot be fully determined as the Plan will be implemented through lower-tier project development, environmental and planning assessments and decision-making. Nonetheless, a comparative evaluation of the various alternatives can be provided.

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

The interactions identified are reflective of likely significant environmental effects:

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

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

Table 7.1 Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objectives
Air	**A**	• To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from transport • Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency • Promote continuing improvement in air quality • Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution • Meet Air Quality Directive standards for the protection of human health — Air Quality Directive • Significantly decrease noise pollution and move closer to WHO recommended levels

Environmental Component	SEO Code	Strategic Environmental Objectives
Climatic Factors	**C**	• To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into infrastructure • Contribute towards the reduction of greenhouse gas emissions in line with national targets • Promote development resilient to the effects of climate change • Promote the use of renewable energy, energy efficient development and increased use of public transport
Population and Human Health	**PHH**	• Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management • Ensure that existing population and planned growth is matched with the required public infrastructure and the required services • Safeguard citizens from environment-related pressures and risks to health and well-being
Biodiversity, Flora and Fauna	**BFF**	• To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species • Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function • Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species • Enhance biodiversity in line with the National Biodiversity Strategy and its targets • To protect, maintain and conserve natural capital
Material Assets	**MA**	• Optimise existing infrastructure and provide new infrastructure to match population distribution proposals • Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes
Soil (and Land)	**S**	• Protect soils against pollution, and prevent degradation of the soil resource • Promote the sustainable use of infill and brownfield sites over the use of greenfield • Safeguard areas of prime agricultural land and designated geological sites
Water	**W**	• Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive • Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas • Integrate sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects
Landscape	**L**	• To implement the identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention
Cultural Heritage	**CH**	• Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage

7.3 Detailed Evaluation of Alternatives

7.3.1 Effects Common to all Alternatives

Each of the alternatives would be part of a wider Plan envisaging compliance with the robust policy framework in place at national, regional and city level. As such, common environmental effects (as detailed on Table 7.2) would be present under Plans adopting each of the different alternatives, though to varying degrees.

Table 7.2 Effects common to all Alternatives

Environmental Component	Significant Positive Effect likely to occur	Potentially Significant Adverse Effect, if unmitigated
Air and climatic factors	• Facilitates improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. • Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets; • Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health; and • Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets.	• Localised emissions to air and associated interactions with human health.
Population and human health	• Provides for, in combination with the wider planning framework, the development of transport infrastructure and services in locations which will facilitate use by those living and working in urban/suburban areas. • Facilitates contribution towards the protection of human health as a result of contributing towards the protection of environmental vectors, especially air.	• Potential interactions if effects upon environmental vectors such as air are not mitigated (refer to “Air and climatic” factors above).
Biodiversity and flora and fauna	• Facilitates lower overall effects on ecology (including designated sites, ecological connectivity and habitats) – due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop more sensitive areas (including greenfield areas) elsewhere. • Contributes towards the protection of vegetation as a result of contributing towards the protection of environmental vectors, especially air.	• In combination with the wider planning framework, arising from both construction and operation of transport infrastructure and services and associated facilities/ infrastructure: loss of/damage to biodiversity in designated sites, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna. • In combination with the wider planning framework, habitat loss, fragmentation and deterioration, including patch size and edge effects. • In combination with the wider planning framework, disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. • In combination with the wider planning framework, effects in riparian zones where new crossings of waters, if any, are progressed. • In combination with the wider planning framework, potential effects on vegetation from transport emissions.

Environmental Component	Significant Positive Effect likely to occur	Potentially Significant Adverse Effect, if unmitigated
Material Assets	• Contributions towards energy security (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of reducing traffic flows and associated energy use. • Contributions towards a mode shift away from the private car to public transport, walking and cycling and associated enhancement of the public realm. • Contributions towards the protection and enhancement of built/amenity assets and infrastructure. • Contributions towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, the Plan would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre.	• In combination with the wider planning framework, generation of construction waste. • In combination with the wider planning framework, loss or damage to built/amenity assets and infrastructure including as a result of new or widened transport infrastructure.
Water	• Facilitates lower overall effects on ground and surface waters due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop areas less well served by water services capable of delivering Water Framework Directive targets (including greenfield areas) elsewhere.	• In combination with the wider planning framework, adverse impacts upon the status of water bodies and entries to the WFD Register of Protected Areas, arising from changes in quality, flow and/or morphology.
Landscape	• Facilitates lower overall effects on landscapes due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop more sensitive landscapes (including greenfield areas) elsewhere.	• In combination with the wider planning framework, occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape.
Cultural Heritage	• Contributions towards the enhancement of cultural heritage and its context as a result of replacing motorised modes with more sustainable and non-motorised modes and enhancing the public realm.	• In combination with the wider planning framework, potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.
Soil	• Minimises land-take and loss of extent of soil resource as a result of facilitating a higher efficiency of land utilisation and a reduction in the need to develop areas (including greenfield areas) beyond the city centre	• In combination with the wider planning framework, adverse impacts on the hydrogeological and ecological function of the soil resource as a result of construction of transport and associated transport facilities/infrastructure. • In combination with the wider planning framework, adverse impacts on features or areas of geological/geomorphological interest as a result of construction of transport and associated transport facilities/infrastructure. • In combination with the wider planning framework, potential for increase in river bank erosion.

7.3.2 Tier 1 Alternatives: Overall Approach

Alternative A - Congestion Charging

As a means of reducing the number of cars driving in Dublin City Centre, the introduction of a zone within which motorists would be required to pay a charge to drive.

The zone could encompass the Inner Core or the Study Area as a whole and would be monitored and enforced by means of cameras. The cost of the scheme would be subject to detailed analysis but would be set at a rate to discourage driving.

Specific arrangements would be considered for blue badge holders as would reduced rates for Low and Zero Emissions vehicles.

Alternative B - Traffic Management

As a means of reducing the number of cars driving in Dublin City Centre, introduce a number of traffic management interventions that would reduce the potential for vehicles to travel through the Inner Core, but would facilitate travel into the area, and access to car parks.

Table 7.3 Comparative Multi-Criteria Analysis of Tier 1 Alternatives

Tier 1 Alternative (selected alternative in **bold**)	**Economy**	**Safety**	**Integration**	**Accessibility and Social Inclusion**	**Environment (Refer also to Table 7.4)**
Alternative A – Congestion Charging	Payments could be ring-fenced for better PT and Cycling	Potential reduced collisions due to reduced traffic	Would support wider transport, public realm and environment objectives	May lead to a situation where those who can afford it simply pay it, excluding those who cannot. May be perceived as unjust for people with disabilities who may have to drive.	Reduced air and noise pollution Reduced carbon emissions Potentially enhanced public realm Lower potential for displacement effects and associated interactions as some traffic with no economic or commercial justification for being there more likely to be removed
Alternative B - Traffic Management	Removes traffic with no economic or commercial justification for being there, freeing up the space for those who need to be there. Less impact on retail etc.	Potential reduced collisions due to reduced traffic	Would support wider transport, public realm and environment objectives.	More equitable than congestion charging in that physical traffic measures apply to all motorists equally. Without specific arrangements, it may be perceived as exclusionary for people with disabilities who may have to drive.	Reduced air and noise pollution Reduced carbon emissions Potentially enhanced public realm Higher potential for displacement effects and associated interactions as some traffic with no economic or commercial justification for being there less likely to be removed

Both Tier 1 alternatives would facilitate improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility would result in the following significant positive effects:

- Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets;
- Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health;
- Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and
- Energy security.[70]

Both Tier 1 alternatives could facilitate significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc., allowing the opportunities provided by the traffic management interventions to deliver a more attractive City Centre. This enhancement of the public realm would both result in spaces where people wish to congregate and where movement is safer and more convenient and benefit cultural heritage (including archaeological and architectural heritage) and its context. It would also provide for enhanced biodiversity and potentially contributes towards urban climate adaptation objectives. [71]

Both Tier 1 alternatives would contribute towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, both alternatives would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. The reduced need to develop areas that are less well serviced, less well connected and generally more environmentally sensitive would result in lower adverse effects upon environmental components, including air and climatic factors (emissions), ecology, landscape designations, water and soil. [72]

Although there would be an overall reduction in traffic flows and associated interactions with air, noise and human heath, there would be potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the City Centre Transport Plan area and beyond. Potential effects, before mitigation is applied, would have the potential to be less significant under **Alternative A**[73]. Potential effects, before mitigation is applied, would have the potential to be more significant under **Alternative B**. [74]

In combination with the wider planning framework, the potential construction and operational effects of physical works would be mitigated so that adverse effects would not be significant. Potential effects, before mitigation is applied, would have the potential to be less significant under **Alternative A**, as less physical works would be required under this alternative. [75] Potential effects, before mitigation is applied, would have the potential to be more significant under **Alternative B**, as more physical works would be required under this alternative. [76]

[70] Refer to "Likely to **Improve** status of SEOs - to a **Greater** degree" interactions on Table 7.4 between both alternatives and SEOs **A**, **C**, **MA** and **PHH**.

[71] Refer to "Likely to **Improve** status of SEOs - to a **Greater** degree" interactions on Table 7.4 between both alternatives and SEOs **PHH**, **CH**, **L**, **B** and **C**.

[72] Refer to "Likely to **Improve** status of SEOs - to a **Greater** degree" interactions on Table 7.4 between both alternatives and SEOs **BFF**, **PHH**, **S**, **W**, **MA**, **A**, **C**, **CH** and **L**.

[73] Refer to "Potential **Conflict** with status of SEOs - likely to be mitigated - to a **Lesser** degree" interactions on Table 7.4 between Alternative A and SEOs **A**, **C**, **MA** and **PHH**.

[74] Refer to "Potential **Conflict** with status of SEOs - likely to be mitigated - to a **Greater** degree" interactions on Table 7.4 between Alternative B and SEOs **A**, **C**, **MA** and **PHH**.

[75] Refer to "Potential **Conflict** with status of SEOs - likely to be mitigated - to a **Lesser** degree" interactions on Table 7.4 between Alternative A and SEOs **BFF**, **PHH**, **S**, **W**, **MA**, **A**, **C**, **CH** and **L**.

[76] Refer to "Potential **Conflict** with status of SEOs - likely to be mitigated - to a **Moderate** degree" interactions on Table 7.4 between Alternative B and SEOs **BFF**, **PHH**, **S**, **W**, **MA**, **A**, **C**, **CH** and **L**.

Table 7.4 Comparative Evaluation Tier 1 Alternatives against SEOs

Tier 1 Alternative (selected alternative indicated in **bold**)	Likely to **Improve** status of SEOs			Potential **Conflict** with status of SEOs - likely to be mitigated			Probable **Conflict** with status of SEOs - unlikely to be mitigated	**No Likely** interaction with status of SEOs
	to a **Greater** degree	to a **Moderate** degree	to a **Lesser** degree	to a **Lesser** degree	to a **Moderate** degree	to a **Greater** degree		
Alternative A - Congestion Charging	**A C MA PHH** **PHH CH L B C** **BFF PHH S W MA A C CH L**			**A C MA PHH** **BFF PHH S W MA A C CH L**				
Alternative B - Traffic Management	**A C MA PHH** **PHH CH L B C** **BFF PHH S W MA A C CH L**				**A C MA PHH** **BFF PHH S W MA A C CH L**			

7.3.3 Tier 2 Alternatives: Traffic Management

Alternative A - Urban Design/ Planting / Amenity/ Plaza

This approach would provide for the traffic management measures to reduce through traffic alongside significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc.

It would capitalise on the opportunities provided by the traffic management interventions to deliver a more attractive City Centre.

Alternative B - Minimalist traffic management measures only

This approach would provide for the traffic management measures only and would effectively leave the traffic-free streets and spaces as they are today.

Table 7.5 Comparative Multi-Criteria Analysis of Tier 2 Alternatives

Alternative (selected alternative in **bold**)	**Economy**	**Safety**	**Integration**	**Accessibility and Social Inclusion**	**Environment (Refer also to Table 7.6)**
Alternative A - Urban Design/ Planting / Amenity/ Plaza	This would be a higher-cost alternative but, by significantly enhancing the attractiveness of the City Centre, would be likely to draw more people into the area, increasing footfall for retail and hospitality.	Higher levels of pedestrian activity and supporting activities could enhance the perception of the City Centre from a personal security point of view.	Introduction of new spaces, enhanced footpaths etc. would meet a range of urban design and environmental objectives.	The decision to pursue Traffic Management may be perceived as exclusionary for those with disabilities and the relative differences within Tier 2 are not significant.	Provides for enhanced biodiversity and potentially contributes towards urban climate adaptation objectives. Provides for an enhanced public realm, including enhancement of cultural heritage and its context.
Alternative B - Minimalist traffic management measures only	Cheaper to implement but would not provide the attractive environment of Alternative A.	This alternative would still likely attract a higher number of pedestrians but less likely to attract the investment in active land uses, therefore may be less advantageous in terms of safety and personal security.	Built environment would be left unchanged; urban design and environmental objectives would not be significantly be contributed towards.	The decision to pursue Traffic Management may be perceived as exclusionary for those with disabilities and the relative differences within Tier 2 are not significant.	Does not provide for enhanced biodiversity or contribute towards urban climate adaptation objectives. Does not provide for an enhanced public realm, including enhancement of cultural heritage and its context.

Both Tier 2 alternatives would facilitate improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility would result in the following significant positive effects:

- Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets;

- Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health;
- Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and
- Energy security.[77]

Alternative A would facilitate significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc., allowing the opportunities provided by the traffic management interventions to deliver a more attractive City Centre. This enhancement of the public realm will both result in spaces where people wish to congregate and where movement is safer and more convenient and benefit cultural heritage (including archaeological and architectural heritage) and its context. It would also provide for enhanced biodiversity and potentially contributes towards urban climate adaptation objectives. [78]

Both Tier 2 alternatives would contribute towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, both alternatives would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. The reduced need to develop areas that are less well serviced, less well connected and generally more environmentally sensitive would result in lower adverse effects upon environmental components, including air and climatic factors (emissions), ecology, landscape designations, water and soil. [79]

Although there would be an overall reduction in traffic flows and associated interactions with air, noise and human heath, there would be potential under **both Tier 2 alternatives** for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the City Centre Transport Plan area and beyond.[80]

In combination with the wider planning framework, the potential construction and operational effects of physical works would be mitigated so that adverse effects would not be significant. Potential effects, before mitigation is applied, would have the potential to be more significant under **Alternative A**, as more physical works would be required under this alternative. [81] Potential effects, before mitigation is applied, would have the potential to be less significant under **Alternative B**, as less physical works would be required under this alternative. [82]

[77] Refer to "Likely to **Improve** status of SEOs - to a **Greater** degree" interactions on Table 7.6 between both alternatives and SEOs **A**, **C**, **MA** and **PHH**.

[78] Refer to "Likely to **Improve** status of SEOs - to a **Greater** degree" interactions on Table 7.6 between Alternative A and SEOs **PHH**, **CH**, **L**, **B** and **C**.

[79] Refer to "Likely to **Improve** status of SEOs - to a **Greater** degree" interactions on Table 7.6 between both alternatives and SEOs **BFF**, **PHH**, **S**, **W**, **MA**, **A**, **C**, **CH** and **L**.

[80] Refer to "Potential **Conflict** with status of SEOs - likely to be mitigated - to a **Lesser** degree" interactions on Table 7.6 between both alternatives and SEOs **A**, **C**, **MA** and **PHH**.

[81] Refer to "Potential **Conflict** with status of SEOs - likely to be mitigated - to a **Moderate** degree" interactions on Table 7.6 between Alternative A and SEOs **BFF**, **PHH**, **S**, **W**, **MA**, **A**, **C**, **CH** and **L**.

[82] Refer to "Potential **Conflict** with status of SEOs - likely to be mitigated - to a **Lesser** degree" interactions on Table 7.6 between Alternative B and SEOs **BFF**, **PHH**, **S**, **W**, **MA**, **A**, **C**, **CH** and **L**.

Table 7.6 Comparative Evaluation Tier 2 Alternatives against SEOs

Tier 2 Alternative (selected alternative indicated in **bold**)	Likely to **Improve** status of SEOs			Potential **Conflict** with status of SEOs - likely to be mitigated			Probable **Conflict** with status of SEOs - unlikely to be mitigated	**No Likely** interaction with status of SEOs
	to a **Greater** degree	to a **Moderate** degree	to a **Lesser** degree	to a **Lesser** degree	to a **Moderate** degree	to a **Greater** degree		
Alternative A - Urban Design / Planting / Amenity / Plaza	**A C MA PHH** **PHH CH L B C** **BFF PHH S W MA A C CH L**			**A C MA PHH**	**BFF PHH S W MA A C CH L**			
Alternative B - Minimalist traffic management measures only	**A C MA PHH** **BFF PHH S W MA A C CH L**			**A C MA PHH** **BFF PHH S W MA A C CH L**				

7.4 Reasons for Choosing the Selected Alternative in light of Other Reasonable Alternatives Considered

The alternatives selected for the Plan are selected having regard to both:

1. The environmental effects that are identified by the SEA and are described above; and
2. Other effects (under the headings of Economy, Safety, Integration and Accessibility and Social Inclusion) that are also described above.

Section 8 Evaluation of Plan Provisions

8.1 Introduction

This section provides an assessment of environmental effects using the information on the current state of the environment (provided in Section 4) and the Strategic Environmental Objectives (see Section 5 and Table 8.1) from implementation of the Plan.

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

The interactions identified are reflective of likely significant environmental effects:

- Interactions that would be *likely to improve the status* of a particular SEO would be likely to contribute towards a significant positive effect on the environmental component to which the SEO relates, including in-combination with the existing statutory planning/decision-making and consent-granting framework.

- Interactions that would *potentially conflict with the status* of *an SEO and would be likely to be mitigated* would be likely to result in potential significant negative effects; however, these effects will be mitigated by measures which have been integrated into the Plan and residual effects would not be significant (see Table 8.3 of this report).

- Interactions that would probably *conflict with the status of an SEO and would be unlikely to be mitigated* would be likely to result in a significant residual negative effect on the environmental component to which the SEO relates.

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

The degree of significance of effects occurring cannot be fully determined as the Plan will be implemented through lower-tier project development, environmental and planning assessments and decision-making. Nonetheless, a strategic assessment can be undertaken.

Table 8.1 Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objectives
Air	**A**	• To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from transport • Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency • Promote continuing improvement in air quality • Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution • Meet Air Quality Directive standards for the protection of human health — Air Quality Directive • Significantly decrease noise pollution and move closer to WHO recommended levels
Climatic Factors	**C**	• To minimise emissions of greenhouse gasses • Integrate sustainable design solutions into infrastructure • Contribute towards the reduction of greenhouse gas emissions in line with national targets • Promote development resilient to the effects of climate change • Promote the use of renewable energy, energy efficient development and increased use of public transport

Environmental Component	SEO Code	Strategic Environmental Objectives
Population and Human Health	**PHH**	• Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management • Ensure that existing population and planned growth is matched with the required public infrastructure and the required services • Safeguard citizens from environment-related pressures and risks to health and well-being
Biodiversity, Flora and Fauna	**BFF**	• To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species • Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function • Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species • Enhance biodiversity in line with the National Biodiversity Strategy and its targets • To protect, maintain and conserve natural capital
Material Assets	**MA**	• Optimise existing infrastructure and provide new infrastructure to match population distribution proposals • Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes
Soil (and Land)	**S**	• Protect soils against pollution, and prevent degradation of the soil resource • Promote the sustainable use of infill and brownfield sites over the use of greenfield • Safeguard areas of prime agricultural land and designated geological sites
Water	**W**	• Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive and Marine Strategy Framework Directive • Avoid inappropriate development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas • Integrate sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects
Landscape	**L**	• To implement the identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention
Cultural Heritage	**CH**	• Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage

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

Likely to **Improve** status of SEOs	Potential **Conflict** with status of SEOs - likely to be mitigated	Probable **Conflict** with status of SEOs - unlikely to be mitigated	**No Likely** interaction with status of SEOs

8.2 Cumulative Effects

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

There are 2 types of cumulative effects that have been considered, namely:

- *Intra-Plan* cumulative effects - these arise from the interactions between different types of environmental effects resulting from a plan, programme, etc. The interrelationships between environmental components that help determine these effects are identified on Table 8.4 e.g. interrelationships between: human health and air quality; human health and water quality; air quality and vegetation; human health and flood risk; and ecology and water quality. Effects that have been identified by the assessment (see Table 8.4) include those which are interrelated; implementation of the Plan will not affect the interrelationships between these components.
- *Inter-Plan* cumulative effects - these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, projects, etc. With regard to potential *inter-Plan* cumulative environmental effects, these occur as a result of the combination of: environmental effects which are identified by the assessment; and the effects arising from other policies, plans and programmes.

Other policies, plans and programmes that have been considered by the assessment of effects include those which are detailed under Section 2.8 ”Relationship with other relevant Plans and Programmes”, Section 3.2 “Hierarchy of Planning and Environmental Assessment”, Section 4 “Relevant aspects of the current state of the Environment”, Section 5 “Strategic Environmental Objectives”, Section 9 “Mitigation Measures” and Appendix I “Relationship with Legislation and Other Plans and Programmes”. These plans and programmes are subject to their own environmental assessment requirements as relevant. Cumulative effects arise especially in combination with the City Development Plan and the Transport Strategy for the Greater Dublin Area as a variety of the issues covered by the Plan provisions are already provided for by these initiatives – as detailed under Section 2 of this SEA Environmental Report. Other examples of policies, plans, programmes and associated projects include:

- Land use and/or transportation policy, plans, programmes and projects (e.g. the National Planning Framework and associated National Development Plan, the National Sustainable Mobility Policy, the National Investment Framework for Transport in Ireland, the Eastern and Midland Regional Spatial and Economic Strategy and projects relating to BusConnects Network, the Core Bus Corridor Programme, the New Dublin Area Bus Service Network, the MetroLink, DART+ and the Greater Dublin Area Cycle Network);

- Climate related policy, plans and programmes (e.g. the National Climate Policy Position and Climate Action 2014, Climate Action and Low Carbon Development Act 2015, as amended, Climate Action Plan 2023[83] and emerging Climate Action Plan 2024, National Mitigation Plan 2017, the National Adaptation Framework 2018 and emerging National Adaptation Framework 2024 and the Dublin Climate Change Adaptation Strategy 2019-2024);

- Water services, waste management and energy infrastructure policy, plans and programmes (e.g. Uisce Éireann’s Water Services Strategic Plan and associated Capital Investment Plan, Regional Waste Management Plan, Grid25 and associated Implementation Programme, Ireland’s National Renewable Energy Action Plan 2010, Strategy for Renewable Energy 2012-2020, National Energy and Climate Plan 2021-2030 and the Renewable Electricity Policy and Development Framework); and

[83] Which includes various actions relating to transport planning e.g. Action No. TR/23/71(TF) “Strategic Transport Planning Work Programme” and associated steps relating to “Development & progression of national legislation, continued programme of review, update, appraisal and planning of services in line with MATS”.

- Environmental protection and management plans (e.g. the National River Basin Management Plan and Flood Risk Management Plans).

Potential cumulative/in combination effects include:

- Contributions towards management of traffic and a shift from motorised transport modes to more sustainable and non-motorised transport modes, in combination with plans and programmes from various sectors, including transport and land use planning.

- Contributions towards reductions in greenhouse gas and other emissions to air and associated achievement of legally binding targets (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of facilitating:
    - A shift from car to more sustainable and non-motorised transport mode;
    - A transition to lower emission vehicles for transport use; and
    - More consolidated urban areas and reductions in sprawl.

- Contributions towards travel related greenhouse gas and other emissions to air (in combination with plans and programmes from all sectors, including transport and land use planning) as a result of facilitating transport infrastructure and services. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.

- Contributions towards energy security and reductions in energy usage (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of facilitating:
    - A shift from car to more sustainable and non-motorised transport mode;
    - A transition to lower emission vehicles for transport use; and
    - More consolidated urban areas and reductions in sprawl.

- Contributions towards the enhancement of cultural heritage (archaeological and architectural) and its context in urban areas and their surrounds (in combination with the provisions of land use plans that have undergone SEA), as a result of replacing motorised transport modes with more sustainable and non-motorised modes such as walking, cycling and light rail.

- Potential effects on all environmental components arising from the construction of new transport related development (in combination with all development arising from plans and programmes from all sectors). The type of these effects are consistent with those described on Table 7.2.

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

8.3 Overall Findings

The City Centre Transport Plan facilitates improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility will result in the following significant positive effects:

- Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets;
- Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement of air quality and protection of human health;
- Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and
- Energy security.

The Plan contributes towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, the Plan would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. The reduced need to develop areas that are less well serviced, less well connected and generally more environmentally sensitive would result in lower adverse effects upon environmental components, including air and climatic factors (emissions), ecology, landscape designations, water and soil.

The Plan facilitates traffic management measures to reduce through traffic alongside significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc., allowing the opportunities provided by the traffic management interventions to deliver a more attractive City Centre. This enhancement of the public realm will both result in spaces where people wish to congregate and where movement is safer and more convenient and benefit cultural heritage (including archaeological and architectural heritage) and its context.

The key potential benefits of the implementation of the Plan can be summarised as follows:

- Reduction in car traffic in the Core City Centre of up to 60%;
- More reliable journey times for economically essential traffic;
- Reduced emissions of CO_2 in the City Centre due to a reduction of 34% in the number of kilometres travelled by private car;
- Improved Air Quality due to reduced traffic levels;
- Reduction in population exposed to traffic noise due to reduced traffic levels;
- A more active and healthier population owing to the increased attractiveness of walking and cycling;
- Reduced risk of traffic collisions due to reduced traffic levels;
- Protection of the architectural heritage of the City Centre from the negative impacts of car traffic;
- Efficient and reliable public transport operations as a result of improved priority and reduction in car traffic;
- Improved cycling facilities in terms of safety, convenience and legibility;
- Improved pedestrian environment with wider footpaths and improved crossings;
- Improved cross-city pedestrian connectivity with 30% less time waiting at junctions on the walk from Stephen's Green to the Spire, and a 17% reduction in pedestrian wait time at O'Connell Bridge;
- Significant public realm benefits through new public spaces;
- A more inclusive City Centre transport environment; and

- A City Centre transport system that is capable of accommodating a significant growth in population; economic activity; social vibrancy; cultural attraction; tourism; and all the other elements of a modern, progressive European capital city.

The National Transport Authority are integrating all recommendations arising from the SEA and AA processes into the Plan (see Section 9 of this report), facilitating compliance of the Plan with various European and National legislation and Guidelines relating to the protection of the environment and the achievement of sustainable development. Implementation of the Plan will contribute towards efforts to achieve a number of the 17 United Nations Sustainable Development Goals[84] of the 2030 Agenda for Sustainable Development.

Table 8.3 details the various types of environmental effects likely to arise with respect to the Plan (as developed from the selected alternatives – see Section 7) as a direct result of development and activities under the Plan and in combination with the wider planning framework (see also Section 8.2). Effects that may arise as a result of implementing the Plan have been mitigated to the extent that the only residual adverse effects likely to occur as a result of implementation of the Plan are those which are identified. Environmental impacts that occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. By complying with appropriate mitigation measures - including those which have been integrated into the Plan - potentially significant adverse environmental effects which could arise as a result of implementing the Plan would be likely to be avoided, reduced or offset.

8.4 Appropriate Assessment

Stage 2 Appropriate Assessment (AA) has been undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The conclusion of the AA is that the Plan will not affect the integrity of the Natura 2000 network[85] of European sites.

8.5 Interrelationship between Environmental Components

The SEA Directive requires the Environmental Report to include information on the likely significant effects on the environment, on issues such as biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors. Likely significant effects on environmental components which are identified include those that are interrelated; implementation of the Plan will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.4.

[84] Including:
- Goal 3. Ensure healthy lives and promote well-being for all at all ages.
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable 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.
- 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.

[85] Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: (a) no alternative solution available; (b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and (c) adequate compensatory measures in place.

Table 8.3 Overall Effects Arising from the Plan

Environmental Component	Likely Environmental Effects, as a direct result of development and activities under the Plan and in combination with the wider planning framework (see also Section 8.2)			SEOs
	Significant Positive Effect likely to occur	**Potentially Significant Adverse Effect, if unmitigated**	**Residual Adverse Effect**[86]	
Air and climatic factors	The City Centre Transport Plan facilitates improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility will result in the following significant positive effects: • Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets; • Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health; and • Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets.	• Localised emissions to air and associated issues[87].	• An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.	A C
Population and human health	• Provides for, in combination with the wider planning framework, the development of transport infrastructure and services in locations which will facilitate use by those living and working in urban/suburban areas. • Facilitates contribution towards the protection of human health as a result of contributing towards the protection of environmental vectors, especially air.	• Potential interactions if effects upon environmental vectors such as air are not mitigated (refer to "Air and climatic" factors above).	• An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.	PHH

[86] Residual adverse environmental effects would be generally non-significant. Significant residual adverse effects would be in compliance with the relevant environmental protection legislation.

[87] Traffic flow modelling has been undertaken by the NTA under two scenarios: one with implementation of both the interventions proposed by the Plan and the planned and committed schemes expected to be in place by 2028; and one with implementation of the planned and committed schemes expected to be in place by 2028 only, prior to any interventions proposed by the Plan. The modelling shows a significant and overall reduction in traffic flows, both within the City Centre and across the wider Greater Dublin Area. This reduction would lead to an overall reduction in the numbers of people exposed to pollution from emissions to air, including noise levels from traffic, in particular within and surrounding the City Centre.
There is potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels. These localised impacts occur along a small number of existing City Centre roads and junctions (where there are existing levels of traffic) and at a number of locations within the wider Greater Dublin Area. The greatest increases in traffic flows under the model occur at the Red Cow and Balally Park and Ride locations, which would seem to imply a greater number of people switching to public transport rather than driving into the City Centre at peak hours.
DCC and the NTA will monitor potential adverse effects relating primarily to Air Quality and Noise due to the displacement of traffic arising out of Plan measures on a regular basis in the context of the wider benefits that are forecast to accrue from the Plan, and mitigate any negative impacts that may emerge, as appropriate. Proposed interventions will be required to demonstrate that they are consistent with all relevant legislative requirements.

Environmental Component	Likely Environmental Effects, as a direct result of development and activities under the Plan and in combination with the wider planning framework (see also Section 8.2)			SEOs
	Significant Positive Effect likely to occur	**Potentially Significant Adverse Effect, if unmitigated**	**Residual Adverse Effect**[86]	
Biodiversity and flora and fauna	• Facilitates lower overall effects on ecology (including designated sites, ecological connectivity and habitats) – due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop more sensitive areas (including greenfield areas) elsewhere. • Contributes towards the protection of vegetation as a result of contributing towards the protection of environmental vectors, especially air. • Potential ecological enhancement opportunities as a result of facilitating improvements in the public realm.	• In combination with the wider planning framework, arising from both construction and operation of transport infrastructure and services and associated facilities/ infrastructure: loss of/damage to biodiversity in designated sites, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna. • In combination with the wider planning framework, habitat loss, fragmentation and deterioration, including patch size and edge effects. • In combination with the wider planning framework, disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. • In combination with the wider planning framework, effects in riparian zones where new crossings of waters, if any, are progressed. • In combination with the wider planning framework, potential effects on vegetation from transport emissions.	• In combination with the wider planning framework, loss of an extent of non-protected habitats as a result of new or widened transport infrastructure that involves the replacement of semi-natural land covers with artificial surfaces. • In combination with the wider planning framework, losses or damage to ecology (these would be in compliance with relevant legislation).	BFF
Material Assets	• Contributions towards energy security (in combination with plans and programmes from all sectors, including energy, transport and land use planning) as a result of reducing traffic flows and associated energy use. • Contributions towards a mode shift away from the private car to public transport, walking and cycling and associated enhancement of the public realm. • Contributions towards the protection and enhancement of built/amenity assets and infrastructure. • Contributions towards the achievement of a transport system that is capable of accommodating a significant growth in population. By facilitating a significant growth in population in well serviced, well connected and generally less environmentally sensitive areas, the Plan would help to facilitate a higher efficiency of land utilisation, increases in sustainable mobility and a reduction in the need to develop areas (including greenfield areas) that are less well serviced, less well connected and generally more environmentally sensitive. This avoids potential significant adverse environmental effects that would otherwise occur beyond the city centre. • Contributions towards appropriate waste management.	• In combination with the wider planning framework, generation of construction waste. • In combination with the wider planning framework, loss or damage to built/amenity assets and infrastructure including as a result of new or widened transport infrastructure.	• In combination with the wider planning framework, residual wastes (these would be disposed of in line with higher level waste management policies). • In combination with the wider planning framework, potential residual losses to built/amenity assets and infrastructure including as a result of new or widened transport infrastructure.	MA

Environmental Component	Likely Environmental Effects, as a direct result of development and activities under the Plan and in combination with the wider planning framework (see also Section 8.2)			SEOs
	Significant Positive Effect likely to occur	**Potentially Significant Adverse Effect, if unmitigated**	**Residual Adverse Effect**[86]	
Soil	• Minimises land-take and loss of extent of soil resource – as a result of facilitating a higher efficiency of land utilisation and a reduction in the need to develop areas (including greenfield areas) beyond the city centre. • Contributions towards the protection of the environment from contamination arising from brownfield development. • Contributions towards the protection of features or areas of geological/geomorphological interest.	• In combination with the wider planning framework, adverse impacts on the hydrogeological and ecological function of the soil resource as a result of construction of transport and associated transport facilities/infrastructure. • In combination with the wider planning framework, adverse impacts on features or areas of geological/geomorphological interest as a result of construction of transport and associated transport facilities/infrastructure. • In combination with the wider planning framework, potential for increase in river bank erosion.	• In combination with the wider planning framework, loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces and from sea level rise/coastal erosion.	S
Water	• Facilitates lower overall effects on ground and surface waters due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop areas less well served by water services capable of delivering Water Framework Directive targets (including greenfield areas) elsewhere. • Contributions towards compliance with the Flood Risk Management Guidelines.	• In combination with the wider planning framework, adverse impacts upon the status of water bodies and entries to the WFD Register of Protected Areas, arising from changes in quality, flow and/or morphology. • In combination with the wider planning framework, increase in the risk of flooding.	• Flood related risks remain due to uncertainty with regard to extreme weather events.	W
Landscape	• Facilitates lower overall effects on landscapes due to higher efficiency of land utilisation with the city centre and a reduction in the need to develop more sensitive landscapes (including greenfield areas) elsewhere. • Contributions towards the protection of landscape designations as a result of facilitating compliance with relevant plans.	• In combination with the wider planning framework, occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape.	• In combination with the wider planning framework, residual visual effects (these would be in compliance with landscape designation provisions).	L
Cultural Heritage	• Contributions towards the protection of cultural heritage (archaeological and architectural) as a result of facilitating compliance with relevant legislation. • Contributions towards the enhancement of cultural heritage and its context as a result of replacing motorised modes with more sustainable and non-motorised modes and enhancing the public realm.	• In combination with the wider planning framework, potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.	• In combination with the wider planning framework, potential alteration to the context and setting of designated cultural heritage however these will occur in compliance with legislation. Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Plan.	CH

Table 8.4 Presence of Interrelationships between Environmental Components

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

8.6 Detailed Evaluation of Certain Plan Provisions

In 2016, Dublin City Council, in conjunction with the National Transport Authority (NTA), published the Dublin City Centre Transport Study, which set out a framework for the managed implementation of transport projects across Dublin City Centre in line with the vision and objectives of the Dublin City Development Plan and the NTA's Transport Strategy for the Greater Dublin Area 2016-2035. The current Dublin City Development Plan (2022- 2028) has encompassed the framework set out in the previous study, but the new policies and objectives of the Development Plan have required a corresponding update of the 2016 City Centre Transport Study.

The Plan is situated in a hierarchy of documents setting out public policy for land use, transport and climate mitigation, including the Dublin City Development Plan, the Transport Strategy for the Greater Dublin Area, the National Climate Action Plan, Project Ireland 2040, the Strategic Investment Framework for Land Transport, the National Investment Framework for Transport in Ireland and the Regional Economic and Spatial Strategy for the Eastern and Midland Region and associated Dublin Metropolitan Area Strategic Plan (for additional detail, please refer to Section 3.2 "Hierarchy of Planning and Environmental Assessment" of this SEA Environmental Report).

These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and already provide for various measures that have been compiled into the Plan.

Individual transport projects must be consistent and comply with these higher-level documents setting out policy relating to land use and transport and are subject to their own project level EIA and AA requirements as relevant.

8.6.1 Chapters 6, 7 and 8 including Plan Vision, Objectives, Sub-Objectives, Planned Network and Traffic Management Principles and Proposals

	Likely to **Improve** status of SEOs **+**	Potential **Conflict** with status of SEOs - likely to be mitigated **-**	Probable **Conflict** with status of SEOs - unlikely to be mitigated **-**	**No Likely** interaction with status of SEOs **0**
The assessment of the provisions of these Chapters against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the: • Environmental effects detailed under subsections 8.2 to 8.6 of this report; and • Assessments of the selected alternatives for the Plan provided at Section 7 of this report. The Vision for the Plan is: A thriving, active City Centre with sustainability and facilitation of emissions reduction as fundamental goals, where the transport system enhances freedom of movement and meets the environmental, social, cultural and economic needs of the people it serves. The overarching objectives and sub-objectives of the Plan are as follows: • To Provide a Significantly Enhanced City Centre Environment - Transition to a low traffic City Centre; - Remove through private car traffic in order to provide more space for a growing number of City Centre residents, workers, shoppers and	**BFF PHH S W MA A C CH L**	**BFF PHH S W MA A C CH L**		

visitors;
- Improve Air Quality;
- Reduce transport and traffic noise;
- Enhance the visual environment;
- Improve the public realm;
- Increase biodiversity; and
- Protect and enhance the experience of the city's natural and architectural heritage.

- To Facilitate the Delivery of a Net-Zero City Centre Transport System
  - Transition to Zero Emissions transport;
  - Reduce access for carbon emitting vehicles;
  - Accommodate high-capacity low-emission public transport;
  - Prioritise walking and cycling; and
  - Provide the transport interventions that support compact and consolidated development.

- To Improve the City Centre's Economy and Liveability
  - Increase the opportunities for people to travel to, from, within and through Dublin City Centre efficiently, effectively and sustainably;
  - Increase the capacity of the transport system;
  - Prioritise sustainable transport capacity;
  - Prepare for the introduction of the major public transport projects and take advantage of the opportunities they will create;
  - Support access for deliveries, people with disabilities, emergency services and other essential vehicles;
  - Manage vehicular access to the City Centre;
  - Meet the Dublin City Development Plan mode share targets;
  - Support the night-time economy and cultural sectors; and
  - Ensure that the City Centre is accessible for all.

The Plan is based on the requirement to consider the provision of all modes collectively, and the process has involved an iterative approach to the consideration of the use of roadspace, however it is important to try and maintain the integrity of recently completed work. The BusConnects Redesign project went through an extensive design process, included the most comprehensive public consultation ever carried out in Ireland. The routes are currently being implemented on a phased basis, and to protect this process, it was considered that for the Plan, the BusConnects Network did not need to be, and should not be, fundamentally altered. Equally the Greater Dublin Area Cycle Network was recently published as part of the Transport Strategy for the Greater Dublin Area, having been subject to a statutory public consultation process as well as a full environmental assessment. Again, it was considered that for the Plan that the Greater Dublin Area Cycle Network would not be fundamentally altered. It is noted however, that both the BusConnects Network and the GDA Cycle Network were designed within the constraints of the existing traffic management arrangements. If the traffic management arrangements within the city centre are agreed and implemented, it will present an opportunity to reconsider these networks within the city centre, to refine and improve as appropriate. Cumulative effects with respect to these and other plans and programmes are also considered under Section 8 above, including Section 8.2 "Cumulative Effects".

The principles for traffic management in the Inner Core are as follows:
- The City Centre will be accessible by private car (this will: maintain access to car parks for workplaces and residences and multi-storey car parks where it does not interfere with the overall aim of the Plan; allow servicing and deliveries at the appropriate times; and maintain access for emergency vehicles)
- North-South / South–North private car movements across the Liffey will be encouraged to take place outside the Inner Core (this will reduce through traffic by private vehicles in the core city centre)
- East-West / West–East private car movements will be encouraged to take place outside the Inner Core (this will reduce through traffic by private vehicles in the core city centre)
- Private car movements within the city centre will be managed (this will: reduce traffic volumes which will reduce noise and air pollution; enable the creation of public spaces; and make the city more liveable for residents and businesses and more welcoming for visitors)

Evolving from the objectives and vision set out in the Plan the other supporting strategies it is clear that in order to bring about the reduction in car traffic in the Inner Core and so allow the City Development Plan vision to be achieved, it is necessary to commence a series of traffic management changes across

the City Centre. The aim of these interventions (as detailed in the Plan for Bachelors Walk and Aston Quay, Westland Row and Pearse Street, Beresford Place and Gardiner Street, College Green and Dame Street and Parliament Street) is to remove as much through traffic from the city core as possible while still balancing the necessary access for deliveries etc. that the City requires. The specific economic, social and cultural role of historic businesses in the City Centre is recognised and their operational needs will be considered in a manner which is balanced with the wider objectives in terms of access to all employment and cultural attractions and environmental improvement. Once the traffic volumes have been reduced, it will open up the possibilities to deliver public realm improvements and transport priorities. These interventions are focused on the management of traffic movement, in the shorter term. It is the intention of Dublin City Council in conjunction with the NTA to implement these interventions in a phased manner within the lifetime of the current City Development Plan, to ensure that the objectives of the Development Plan can be delivered. The provisions in these Chapters will facilitate improvements in sustainable mobility and overall reductions in traffic flows, including a shift from car to more sustainable and non-motorised transport modes. Improvements in sustainable mobility will result in the following significant positive effects: • Reductions in greenhouse gas emissions and associated achievement of legally binding greenhouse gas emissions targets; • Reductions in all emissions to air, including noise, and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health; • Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and • Energy security. Traffic flow modelling has been undertaken by the NTA under two scenarios: one with implementation of both the interventions proposed by the Plan and the planned and committed schemes expected to be in place by 2028; and one with implementation of the planned and committed schemes expected to be in place by 2028 only, prior to any interventions proposed by the Plan. The modelling shows a significant and overall reduction in traffic flows, both within the City Centre and across the wider Greater Dublin Area. This reduction would lead to an overall reduction in the numbers of people exposed to pollution from emissions to air, including noise levels from traffic, in particular within and surrounding the City Centre. There is potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels. These localised impacts occur along a small number of existing City Centre roads and junctions (where there are existing levels of traffic) and at a number of locations within the wider Greater Dublin Area. The greatest increases in traffic flows under the model occur at the Red Cow and Balally Park and Ride locations, which would seem to imply a greater number of people switching to public transport rather than driving into the City Centre at peak hours. DCC and the NTA will monitor potential adverse effects relating primarily to Air Quality and Noise due to the displacement of traffic arising out of Plan measures on a regular basis in the context of the wider benefits, that are forecast to accrue from the Plan, and mitigate any negative impacts that may emerge, as appropriate. Proposed interventions will be required to demonstrate that they are consistent with all relevant legislative requirements. The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 “Mitigation Measures” of this report. The integration of SEA recommendations into the Plan will help to ensure that: • The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and • The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised. All provisions in these Chapters of the Plan would contribute towards sustainable development and the protection and management of the environment.				

8.6.2 Chapter 9 Public Realm Opportunities

	Likely to **Improve** status of SEOs +	Potential **Conflict** with status of SEOs - likely to be mitigated -	Probable **Conflict** with status of SEOs - unlikely to be mitigated -	**No Likely** interaction with status of SEOs 0
The assessment of the provisions of these Chapters against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the: • Environmental effects detailed under subsections 8.2 to 8.6 of this report; and • Assessments of the selected alternatives for the Plan provided at Section 7 of this report. The traffic management changes set out in Chapter 8 of the Plan will open up significant opportunities for an enhanced public realm in Dublin City Centre. Chapter 9 of the Plan sets these out in brief detail as a set of concept sketches and photomontages - these are examples of how they might develop into new focal points for Dublin. All of these concepts would require comprehensive planning and design work and will be subject to the appropriate assessment and planning consent procedures prior to delivery. At many of these locations, once traffic changes have been implemented, and in advance of the delivery of permanent projects, appropriate interim improvements will be put in place. The primary potential opportunities set out in this chapter relate to the following locations: College Green and Dame Street; Parliament Street; Bachelor's Walk; South Quays; Liberty Place; Custom House Quay; Gardiner Street; Pearse Street and Tara Street; Lincoln Place; and Christchurch Place. Facilitating traffic management measures to reduce through traffic alongside significant investment in the public realm in the form of new civic plazas, wider footpaths, high-quality segregated cycle tracks, lighting, greening etc., would allow the opportunities provided by the traffic management interventions to deliver a more attractive City Centre. This enhancement of the public realm will both result in spaces where people wish to congregate and where movement is safer and more convenient and benefit cultural heritage (including archaeological and architectural heritage) and its context. It would also provide for enhanced biodiversity and potentially contributes towards urban climate adaptation objectives. The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. The integration of SEA recommendations into the Plan will help to ensure that: • The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and • The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised. All provisions in these Chapters of the Plan would contribute towards sustainable development and the protection and management of the environment.	**BFF PHH S W MA A C CH L**	**BFF PHH S W MA A C CH L**		

8.6.3 Chapters 10 to 21 – including Priorities for the City

	Likely to **Improve** status of SEOs +	Potential **Conflict** with status of SEOs - likely to be mitigated -	Probable **Conflict** with status of SEOs - unlikely to be mitigated -	**No Likely** interaction with status of SEOs 0
The assessment of the provisions of these Chapters against Strategic Environmental Objectives (SEOs BFF, PHH, S, W, MA, A, C, CH and L) is consistent with the: • Environmental effects detailed under subsections 8.2 to 8.6 of this report; and • Assessments of the selected alternatives for the Plan provided at Section 7 of this report. These Chapters set out Plan provisions, including those relating to priorities, under the following headings: • The City and Traffic • The City of Public Transport • The City and Taxis • The City of Walking • The City of Cycling • The City of Future Mobility • The City of Equality • The City for Residents • The City for Business • The City for Visitors • The City of Public Space These provisions are situated in a hierarchy of existing provisions from documents setting out public policy for land use, transport and climate mitigation, including the Dublin City Development Plan, the Transport Strategy for the Greater Dublin Area, the National Climate Action Plan, Project Ireland 2040, the Strategic Investment Framework for Land Transport, the National Investment Framework for Transport in Ireland and the Regional Economic and Spatial Strategy for the Eastern and Midland Region and associated Dublin Metropolitan Area Strategic Plan (for additional detail, please refer to Section 3.2 "Hierarchy of Planning and Environmental Assessment" of this SEA Environmental Report). These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and already provide for various measures that have been compiled into the Plan. Individual transport projects must be consistent and comply with these higher-level documents setting out policy relating to land use and transport and are subject to their own project level EIA and AA requirements as relevant. Cumulative effects with respect to these and other plans and programmes are also considered under Section 8 above, including Section 8.2 "Cumulative Effects". The SEA process that has been undertaken alongside the preparation of the Plan has brought about various changes to the emerging Plan through an iterative process. Some of these measures are reproduced under Section 9 "Mitigation Measures" of this report. The integration of SEA recommendations into the Plan will help to ensure that: • The potential significant adverse effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are avoided, reduced or offset; and • The beneficial environmental effects of implementing the Plan, in combination with implementation of other provisions from the Plan and other plans, programmes, etc., are maximised. All provisions in these Chapters of the Plan would contribute towards sustainable development and the protection and management of the environment.	**BFF PHH S W MA A C CH L**	**BFF PHH S W MA A C CH L**		

Section 9 Mitigation Measures

9.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Plan. Various environmental sensitivities and issues have been communicated to the Plan-preparation team through the SEA and Appropriate Assessment (AA) processes.

By integrating related recommendations into the Plan, beneficial environmental effects of implementing the Plan have been and will be maximised and potential adverse effects have been and will be avoided, reduced or offset.

Mitigation is achieved through:

- Strategic work undertaken by the Authorities to ensure contribution towards environmental protection and sustainable development;
- Considering alternatives for the Plan;
- The integration of individual environmental protection and management-related provisions into the text of the Plan; and
- The integration of individual provisions into the environmental protection and management-related provisions into the existing Dublin City Development Plan and Transport Strategy for the Greater Dublin Area.

9.2 Early work undertaken to ensure contribution towards environmental protection and sustainable development

Far in advance of the placing of the Plan (and associated SEA and AA) on public display, early work was undertaken that has helped to ensure that the Plan contributes towards environmental protection and sustainable development.

Many proposals included within the Plan have already been included within the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area, which are already in force across the Transport Plan area.

The Plan's Vision[88] and Objectives[89] to which sustainable development and environmental protection and management are central, provide the basis for its detailed provisions.

9.3 Consideration of alternatives

Although strategic alternatives in relation to the content of the Plan were considerably limited for the Plan (see Section 6), as part of the Plan preparation/SEA process, alternatives for the Plan were considered.

These alternatives are assessed by the SEA process (see Section 7), facilitating an informed choice with respect to the type of Plan that is to be finalised.

[88] A thriving, active City Centre with sustainability and facilitation of emissions reduction as fundamental goals, where the transport system enhances freedom of movement and meets the environmental, social, cultural and economic needs of the people it serves.
[89] To provide a significantly enhanced city centre environment; to facilitate the delivery of a net-zero city centre transport system; and to improve the city centre's economy and liveability.

9.4 Integration of individual measures into the Plan

The SEA and AA processes that have been undertaken alongside the preparation of the Plan have brought about changes to the emerging Plan thereby enabling the mitigation of any potentially adverse environmental effects. All recommendations made by the SEA and AA processes are included on Table 9.1 and Table 9.2 below and have been integrated into the Plan.

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

9.5 Integration of individual provisions into the text of the existing City Development Plan and Transport Strategy

In addition to the individual provisions integrated into the text of the Transport Plan, individual provisions relating to environmental protection and management have been integrated into the existing Dublin City Development Plan and Transport Strategy for the Greater Dublin Area, which are already in force across the Transport Plan area. It is a specific provision of the Transport Plan to ensure that all of the provisions from the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area identified as mitigation in the SEA Environmental Report and Natura Impact Statement that accompany the Plan shall be complied with throughout the implementation of the Plan. These measures include:

Dublin City Development Plan

- Chapter 1: Section 1.5
- CA1 National Climate Action
- CA23 The Circular Economy
- SI2 Integrating Water Services with Development
- SI4 Drainage Infrastructure Design Standards
- SI7 Water Quality Status
- SI9 Groundwater Pollution
- SIO4 River Basin Management Plan
- SIO9 Planning for Surface Water Management
- SI14 Strategic Flood Risk Assessment
- SI15 Site-Specific Flood Risk Assessment
- SI22 Sustainable Drainage Systems
- SI25 Surface Water Management
- SI27 Sustainable Waste Management
- SIO16 Eastern-Midlands Region Waste Management Plan
- SIO19 Consultation with Regional Waste Management Office
- SI34 Management of Air Quality
- SIO21 Air Quality Data Collection
- SIO22 City Ambient Air Quality Monitoring Network
- SI35 Ambient Noise Quality
- SI36 Noise Management
- SI37 Noise Sensitive Development
- SI39 Protection of Designated Quiet Areas
- SIO23 Dublin Agglomeration Environmental Noise Action Plan
- SIO24 Noise Monitoring and Enforcement
- SI42 Light Pollution
- GI7 Connecting Greening Elements in Site Design
- GIO3 Current and Future Greening Strategies
- GIO5 Design Guide for Public Open Space
- GI9 European Union Natura 2000 Sites
- GI10 Flora and Fauna Protected under National & European Legislation Located Outside Designated Areas
- GI11 Proposed Natural Heritage Areas
- GI13 Areas of Ecological Importance for Protected Species
- GI14 Ecological/Wildlife Corridors
- GI15 Inland and Sea Fisheries
- GI18 Minimise Impact – Light and Noise
- GIO7 National Biodiversity Action Plan 2017-2021

- GIO8 Dublin City Biodiversity Action Plan 2021 - 2025
- GIO10 All Ireland Pollinator Plan 2021 - 2025
- GI19 Protect and Enhance Landscapes
- GI20 Views and Prospects
- GI21 Promote City Landscape
- GI30 Maintain and Improve Connectivity of Freshwater and Estuarine Habitats/EU Birds & Habitats Directives
- GI31 Protect and Improve Ecological Status of Rivers under the EU Water Framework Directive
- GI37 Protection and Management of Dublin Bay
- GI41 Protect Existing Trees as Part of New Development
- GI42 Tree Management
- GIO42 Trees as Wildlife Corridor or 'Stepping Stones'
- GIO43 Urban Tree Canopy Plan
- BHA1 Record of Protected Structures
- BHA2 Development of Protected Structures
- BHA3 Loss of Protected Structures
- BHAO1 Buildings-at-Risk Register
- BHA7 Architectural Conservation Areas
- BHAO2 Designation of ACAs
- BHA9 Conservation Areas
- BHA12 Industrial, Military and Maritime, Canal-side and Rural Heritage
- BHA15 Twentieth Century Buildings and Structures
- BHAO6 Twentieth Century Buildings, Structures and the RPS
- BHA16 Industrial Heritage
- BHAO8 Industrial Heritage and the RPS
- BHA18 Historic Ground Surfaces, Street Furniture and Public Realm
- BHA19 Historic Street Furniture and the RPS
- BHA23 Climate Action
- BHA26 Archaeological Heritage

Transport Strategy for the Greater Dublin Area:

- Strategy Section 7.4.1 Environmental Assessment
- Strategy Section 16. Climate Action Management
- Strategy Section 18. Environmental Protection and Management

Table 9.1 Integration of individual provisions relating to environmental protection and management into the Plan

Plan Reference	Plan Text
8. City Centre Traffic Management Proposals	DCC and the NTA will monitor these effects[90] on a regular basis in the context of the wider benefits which are forecast to accrue from this plan, and mitigate any negative impacts that may emerge, as appropriate.
21.1 Wider Planning Framework and the Regulatory Framework for Environmental Protection and Management	As detailed earlier, the plan will complement, and support, the implementation of the Dublin City Development Plan 2022-2028 and the Transport Strategy for the Greater Dublin Area 2022-2042 by providing a more detailed framework for improving the transportation system within the City Centre. In order to be realised, projects identified in this plan (in a similar way to other projects from any other sectors) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework. It is a specific provision of this plan to ensure that all of the provisions from the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area identified as mitigation in the SEA Environmental Report and Natura Impact Statement that accompany the Study shall be complied with throughout the implementation of this Study. In implementing this plan, the City Council will cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management and will ensure that plans, programmes and projects comply with EU Directives – including the Habitats Directive (92/43/EEC), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.
21.2 Lower-level Decision Making	Lower levels of decision making and environmental assessment should consider the environmental sensitivities identified in Section 4 of the SEA Environmental Report, including the following: • Special Areas of Conservation and Special Protection Areas; • Features of the landscape that provide linkages/connectivity to designated sites (e.g. watercourses and areas of semi-natural habitat, such as linear woodlands); • Salmonid Waters; • Shellfish Waters; • Nature Reserves; • Natural Heritage Areas; • Areas likely to contain a habitat listed in Annex 1 of the Habitats Directive; • Entries to the Record of Monuments and Places and Zones of Archaeological Potential; • Entries to the Record of Protected Structures; • Un-designated sites of importance to wintering or breeding bird species of conservation concern; • Architectural Conservation Areas; and • Special Amenity Area Order sites and other relevant landscape designations.
21.3 Corridor and Route Selection Process	The following Corridor and Route Selection Process will be undertaken for relevant new infrastructure: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection. In both stages, environmental constraints and opportunities will be key factors and the advice of relevant specialists will be sought. Site-specific field data will also be used. The need to consider other planning and transport matters is also recognised.
21.4 Appropriate Assessment	All projects and plans arising from this plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and subsequent Appropriate Assessment where necessary, that: • The plan or project will not give rise to adverse direct, indirect or secondary effects on the integrity of any European site (either individually or in combination with other plans or projects); or • The plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or • The plan or project will have a significant adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, restricted to reasons of human health or public safety, to

[90] Potential adverse effects relating primarily to Air Quality and Noise due to the displacement of traffic arising out of Plan measures.

Plan Reference	Plan Text
	beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.
21.5 Protection of Natura 2000 Sites	No projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this plan (either individually or in combination with other plans or projects), except as provided for in Article 6(4) of the Habitats Directive, viz. there must be: a) no alternative solution available; b) imperative reasons of overriding public interest for the project to proceed; and c) adequate compensatory measures in place.
21.6 Climate Change, Emissions and Energy	As identified in the SEA Environmental Report that accompanies this plan, the plan facilitates sustainable mobility and associated positive effects, including those relating to: • Reductions in greenhouse gas emissions and associated achievement of legally binding targets; • Reductions in emissions to air and associated achievement of air quality objectives, thereby contributing towards improvement or air quality and protection of human health; • Reductions in consumption of non-renewable energy sources and achievement of legally binding renewable energy targets; and • Energy security. In implementing the plan, the City Council will support, in addition to the provisions of the Dublin City Development Plan and the Transport Strategy for the Greater Dublin Area, relevant provisions contained in the National Energy and Climate Plan, the Climate Action Plans (2023 & 2024), National Climate Change Adaptation Framework (2018), the National Mitigation Plan (2017), the Dublin City Council Climate Action Plan 2019-2024 and the Department of Transport's Sectoral Adaptation Plan for Transport Infrastructure, which builds on the 2017 "Adaptation Planning – Developing Resilience to Climate Change in the Irish Transport Sector". Cognisant of the imperative to reduce emissions, DCC and the NTA will seek to ensure primacy for transport options that provide for unit reductions in carbon emissions. This can most effectively be done by promoting public transport, walking and cycling, and by actively seeking to reduce car use in circumstances where alternative options are available. During the preparation and/or review of policies and plans relating to climate charge, carbon emissions and energy usage, DCC and the NTA will seek to integrate plan objectives, as appropriate. By contributing towards a reduction in the use of the private car for trips, the plan provides for an overall reduction in the numbers of people exposed to pollution from emissions to air, including unacceptable noise levels from traffic, in particular within the City Centre. The plan has considered the potential for displacement of traffic to lead to localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels and identified that such impacts are unlikely to be significant. Proposed interventions will be required to demonstrate that they are consistent with all relevant legislative requirements.
21.7 Other SEA and AA Recommendations	In implementing the Plan, the City Council will ensure that the measures included in Table 9.2 of the SEA Environmental Report and the Natura Impact Statement are complied with.
22. Monitoring	As part of this plan, the NTA and DCC will implement an expanded annual monitoring of the following inside the Canals: • Canal Cordon counts of travel by all modes; • Liffey Bridge counts of travel by all modes; • Air Quality monitoring; • Noise monitoring; • Public transport journey times through the • City Centre; • Public transport passenger numbers; • Progress in implementing City Centre • Plan measures

The SEA and AA recommendations detailed in Table 9.2 below are integrated into the Plan through the commitment described in Table 9.1 above entitled "Other SEA/AA Recommendations". These measures are linked to specific environmental components and the potential adverse effects that would be present if the measures were not integrated into the Plan.

Table 9.2 Provisions referred to in the Plan under "21.7 Other SEA and AA Recommendations"

Environmental component benefitting	Potentially Significant Adverse Effect, mitigated	Requirement
Various	Various – see below	**Construction and Environmental Management Plans** Construction Environment Management Plans (CEMPs) shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including: a. location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse, b. location of areas for construction site offices and staff facilities, c. details of site security fencing and hoardings, d. details of on-site car parking facilities for site workers during the course of construction, e. details of the timing and routing of construction traffic to and from the construction site and associated directional signage, f. measures to obviate queuing of construction traffic on the adjoining road network, g. measures to prevent the spillage or deposit of clay, rubble or other debris, h. alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works, i. details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels, j. containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained; such bunds shall be roofed to exclude rainwater, k. disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, l. a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains, m. details of a water quality monitoring and sampling plan. n. if peat is encountered - a peat storage, handling and reinstatement management plan. o. measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed). p. appointment of an ecological clerk of works at site investigation, preparation and construction phases. q. details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity and ecological functioning.
Various	Various – see below	**Maintenance Plan** Lower tier assessments should examine the need for Maintenance Plans informed by environmental considerations to be prepared and implemented.
Air and Climatic Factors	Localised emissions to air and associated interactions with human health.	Please refer to the overall approach and detail provided for by the Plan, which focusses significant levels of investment in sustainable transport modes and addresses Climate Change, Emissions and Energy at Section 21.7.
		Air and Energy Contribute towards: compliance and consistency with air quality legislation and the Air Quality Plan for Dublin; greenhouse gas emission targets; management of noise levels, including taking into account available noise maps and Noise Action Plans for the Dublin Agglomeration (including provisions relating to the preservation of Quiet Areas); and reductions in energy usage.
		Climate Adaptation and Resilience Improve resilience and adaptation to climate change by taking into account issues including the following in the siting and deign of projects: • Extreme precipitation and risk of high river flows and associated implications including those relating to pluvial and fluvial flooding, bridge scour, soil erosion and landslides; • Sea level rise and storm surge and associated implications; and • Extreme temperatures and associated implications including those relating to the operation of transport and ancillary infrastructure and services.

Environmental component benefitting	Potentially Significant Adverse Effect, mitigated	Requirement
Population and human health	Potential interactions if effects upon environmental vectors such as air are not mitigated	**Human Health** Assess proposals for development in terms of, inter alia, potential impact on existing adjacent developments, existing land uses and/or the surrounding landscape. Where proposed developments would be likely to have a significant adverse effect on the amenities of the area through pollution by noise, fumes, odours, dust, grit or vibration, or cause pollution of air, water and/or soil, mitigation measures shall be introduced in order to eliminate adverse environmental impacts or reduce them to an acceptable operating level.
		Green and Existing Green Infrastructure Proposals for greenway development should contribute towards the protection or enhancement of existing green infrastructure and have regard to the EPA and HSE research and associated toolkits into the benefits of blue and green spaces.
Biodiversity and flora and fauna	- In combination with the wider planning framework, arising from both construction and operation of transport infrastructure and services and associated facilities/ infrastructure: loss of/damage to biodiversity in designated sites, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna. - In combination with the wider planning framework, habitat loss, fragmentation and deterioration, including patch size and edge effects. - In combination with the wider planning framework, disturbance (e.g. due to noise and lighting along transport corridors) and	**Protection of Biodiversity including Natura 2000 Network** Contribute, as appropriate, towards the protection of designated ecological sites. Contribute towards compliance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines, including the following and any updated/superseding documents): • EU Directives, including the Habitats Directive (92/43/EEC, as amended)[91], the Birds Directive (2009/147/EC)[92], the Environmental Liability Directive (2004/35/EC)[93], the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC), the Water Framework Directive (2000/60/EC) and the Strategic Environmental Assessment Directive (2001/42/EC). • National legislation, including the Wildlife Acts 1976 and 2010 (as amended), the Planning and Development Act 2000 (as amended) and associated Regulations, Environmental Impact Assessment Regulations, the European Union (Water Policy) Regulations 2003 (as amended), the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), the European Communities (Environmental Liability) Regulations 2008 (as amended)[94] and the Flora Protection Order 2015. • National policy guidelines (including any clarifying Circulars or superseding versions of same), including the "Landscape and Landscape Assessment" Draft Guidelines 2000, the Environmental Impact Assessment Sub-Threshold Development Guidelines 2003, Strategic Environmental Assessment Guidelines 2004 and the Appropriate Assessment Guidance 2010. • Catchment and water resource management Plans, including the relevant River Basin Management Plan and Flood Risk Management Plan (including any superseding versions of same). • Biodiversity Plans and guidelines, including the 3rd National Biodiversity Plan 2017-2023 (including its measures relating to ecological corridors and any superseding version of same) and the All Ireland Pollinator Plan. • Freshwater Pearl Mussel Regulations (S.I. 296 of 2009) (including any associated designated areas or management plans). • Ireland's Environment 2020 - An Assessment (EPA, 2020, including any superseding versions of same), and to make provision where appropriate to address the report's goals and challenges. Where developments, arising from this Plan, do not require Environmental Impact Assessment, a non-statutory Ecological Impact Assessment may be required to assess potential impacts on biodiversity.
		NPWS & Integrated Management Plans Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for European sites involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans. The NPWS's current priority is to identify site specific conservation objectives; management plans may be considered after this is done. Where Integrated Management Plans are being prepared for European sites (or parts thereof), the National Parks and Wildlife Service shall be engaged with in order to ensure that plans are fully integrated with the Strategy and other plans and programmes, with the intention that such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations, including those of local communities.
		Biodiversity and Ecological Networks Contribute towards the protection and enhancement of biodiversity and ecological connectivity including corridors or stepping stones in the context of Article 10 of the Habitats Directive.

[91] Including Annex I habitats, Annex II species and their habitats and Annex IV species and their breeding sites and resting places (wherever they occur).
[92] Including Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur).
[93] Including protected species and natural habitats.
[94] Including protected species and natural habitats.

Environmental component benefitting	Potentially Significant Adverse Effect, mitigated	Requirement
	displacement of protected species. - In combination with the wider planning framework, effects in riparian zones where new crossings of waters, if any, are progressed. - In combination with the wider planning framework, potential effects on vegetation from transport emissions.	**Protection of Riparian Zone and Waterbodies and Watercourses** Help to ensure that waterbodies and watercourses are protected from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include the preservation habitat features/structure, such as treeline density, and protection buffers in riverine areas, as appropriate.
		Biodiversity including non-designated biodiversity Ensure the undertaking of appropriately detailed surveying and assessment at project/EIA level and minimisation of loss of biodiversity, including old trees or tree lines or areas of vegetation, as a result of the development of new or widened infrastructure. Help to ensure the appropriate protection of non-designated habitat features, landscapes and biological diversity. Where possible, to strive to achieve no net loss of these features as a result of new development granted permission under the Plan. Contribute towards the protection and management of fisheries[95] as appropriate and take into account Inland Fisheries Ireland's "Planning for Watercourses in the Urban Environments" (2020) for developments along watercourses.
		Non-native invasive species Support, as appropriate, the National Parks and Wildlife Service's efforts to seek to control and manage the spread of non-native invasive species on land and water. Where the presence of non-native invasive species is identified at the site of any proposed development or where the proposed activity has an elevated risk of resulting in the presence of these species, details of how these species will be managed and controlled will be required.
Material Assets	- In combination with the wider planning framework, generation of construction waste. - In combination with the wider planning framework, loss or damage to built/amenity assets and infrastructure including as a result of new or widened transport infrastructure.	Also see Construction and Environmental Management Plans provision above
		Construction Waste Demonstrate that all waste arising during construction phase will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts and regulations and any of the relevant Local Authorities Waste Management Plans. Construction Waste Management Plans will be implemented to minimise waste and ensure correct handling and disposal of construction waste streams in accordance with the Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment, July 2006.
		Waste Creation Support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible.
		Waste Disposal Safeguard the environment by seeking to ensure that residual waste is disposed of appropriately.
		Public Assets and Infrastructure Contribute towards the protection of public assets and infrastructure including resources such as: public open spaces, parks and recreational areas; public buildings and services; and utility infrastructure (electricity, gas, telecommunications, water supply, wastewater infrastructure etc.)
Water	- In combination with the wider planning framework, adverse impacts upon the status of water bodies and entries to the WFD Register of Protected Areas, arising from changes in quality, flow and/or morphology. - In combination with the wider planning framework, increase in the risk of flooding.	Also see Construction and Environmental Management Plans provision above and measures under soil above and material assets below
		Water Framework Directive and associated legislation Contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations, 2010 (S.I. No. 9 of 2010) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same). To support the application and implementation of a catchment planning and management approach to development and conservation, including the implementation of Sustainable Drainage System techniques for new development.
		River Basin Management Plan Support the implementation of the relevant recommendations and measures as outlined in the most up to date River Basin Management Plan, and associated Programme of Measures. Proposed plans, programmes and projects shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands. Also to have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.
		Flood Risk Management Guidelines Comply with the Planning System and Flood Risk Management Guidelines (2009, DEHLG/OPW) (including any clarifying Circulars or superseding versions of same) and relevant outputs of the Catchment and Flood Risk Assessment and Management Studies.

[95] Including with regard to water quality, surface water hydrology, fish spawning and nursery areas, passage of migratory fish, ecosystem structure and functioning and sport and commercial fishing and angling resources.

Environmental component benefitting	Potentially Significant Adverse Effect, mitigated	Requirement
		Surface Water Drainage and Sustainable Drainage Systems (SuDs) Ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as appropriate.
Landscape	- In combination with the wider planning framework, occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape.	**Landscape Designations** Contribute, as appropriate, towards the protection of landscape designations from incompatible developments. Proposals for development that have the potential to significantly adversely impact upon these designations shall be accompanied by an assessment of the potential landscape and visual impacts of the proposed development - demonstrating that landscape impacts have been anticipated and avoided to a level consistent with the sensitivity of the landscape and the nature of the designation.
		Amenity Contribute towards the protection of areas of amenity value and minimise losses, as a result of the development of new or widened infrastructure.
Cultural Heritage	- In combination with the wider planning framework, potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.	**Archaeological Heritage** Contribute, as appropriate, towards the protection and sympathetic enhancement of archaeological heritage, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended) and the National Monuments Act, 1930 (as amended). Any alterations to archaeological heritage or its context, including that which may arise as a result of the development of new or widened infrastructure, shall be in compliance with relevant legislation.
		Protection of Archaeological Sites Contribute, as appropriate, towards the protection of archaeological sites and monuments and their settings, archaeological objects and underwater archaeological sites that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are the subject of Preservation Orders or have been registered in the Register of Historic Monuments. Contribute, as appropriate, towards the protection and preservation of archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and Places.
		Consultation Consult with the National Monuments Service of the Department of Housing, Local Government and Heritage in relation to proposed developments adjoining archaeological sites.
		Underwater Archaeological Sites Contribute, as appropriate, towards the protection and preservation of underwater archaeological sites in riverine, intertidal and sub-tidal locations.
		Architectural Heritage Contribute towards the protection of architectural heritage by complying, as appropriate, with the legislative provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and the policy guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document). Any alterations to architectural heritage or its context, including that which may arise as a result of the development of new or widened infrastructure, shall be in compliance with relevant legislation.

Environmental component benefitting	Potentially Significant Adverse Effect, mitigated	Requirement
Soil	- In combination with the wider planning framework, adverse impacts on the hydrogeological and ecological function of the soil resource as a result of construction of transport and associated transport facilities/infrastructure. - In combination with the wider planning framework, adverse impacts on features or areas of geological/geomorphological interest as a result of construction of transport and associated transport facilities/infrastructure. - In combination with the wider planning framework, potential for increase in river bank erosion.	Also see requirements under other heading of water above.
		Soil Protection and Contamination Ensure that adequate soil protection measures are undertaken where appropriate. Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed.
		Areas of geological interest and GSI Datasets Contribute towards the appropriate protection and maintenance of the character, integrity and conservation value of features or areas of geological interest. Take GSI datasets into account as appropriate, including those relating to geoheritage, groundwater, geohazards, natural resources and coastal vulnerability.
		Land Take Contribute towards the target of the National Planning Framework's (2018) SEA to "Maintain built surface cover nationally to below the EU average of 4%."

Section 10 Monitoring Programme

10.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which will be used in order to monitor the likely significant effects of implementing the Plan. It has been guided by the EPA guidance on this issue, "Guidance on SEA Statements and Monitoring" (2020).

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

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

10.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 5 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Monitoring measures chosen for the SEA of the Plan align with those used in the SEA of the Transport Strategy for the Greater Dublin Area and in the SEA of the Dublin City Development Plan. This consistency across the hierarchy of land use/transport planning will improve the efficiency and effectiveness of future monitoring.

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

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

10.3 Sources

The Plan forms part of the wider land use planning framework comprising a hierarchy of policies, plans, programmes, etc. This wider framework, including the City Development Plan, the Transport Strategy for the Greater Dublin Area, the Eastern and Midland RSES, and the National Planning Framework, is subject to its own SEA (and associated monitoring) requirements. At lower tiers of the hierarchy, individual projects will be subject to their own monitoring requirements, as relevant.

In implementing the Monitoring Programme, this hierarchy of planning and environmental monitoring will be taken into account.

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

10.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan. This report will address the indicators set out on Table 10.1. DCC and the NTA are responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of remedial action.

10.5 Thresholds

Thresholds at which corrective action will be considered include:

- Impacts on the integrity of European sites as a result of Plan projects that have not been granted permission following an assessment of imperative reasons of overriding public interest;
- Complaints received from statutory consultees regarding avoidable impacts on any environmental components resulting from development which is granted permission under the Plan;
- Court cases taken by the Department of Housing, Local Government and Heritage regarding impacts upon archaeological heritage from development which is provided for by the Plan;
- Fish kills directly attributable to development which is provided for by the Plan; and
- The occurrence of flood events which are directly attributable to development which is provided for by the Plan.

Table 10.1 Selected Indicators, Targets and Monitoring Sources

Environmental Component	SEO Code	Indicators	Targets	Selection of Sources that may be used	Remedial Action
Air	**A**	• Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels • NO_x, SO_x, PM_{10} and $PM_{2.5}$ as part of Ambient Air Quality Monitoring	• Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels • Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter	• CSO data • Data from the National Travel Survey • EPA Air Quality Monitoring • Internal review of Plan implementation. As part of the Plan, the NTA and DCC will implement an expanded annual monitoring inside the Canals of Air Quality and Noise. DCC and the NTA will monitor potential adverse effects relating primarily to Air Quality and Noise due to the displacement of traffic arising out of Plan measures on a regular basis in the context of the wider benefits that are forecast to accrue from the Plan, and mitigate any negative impacts that may emerge, as appropriate.	• Where proportion of population shows increase in private car use above previous CSO figures, the Authority will coordinate with the Authorities (and the Regional Assembly, DHLGH and DECC as relevant) to develop a tailored response.
Climatic Factors [96]	**C**	• Implementation of the Plan, which will contribute towards and facilitate climate action • Carbon dioxide (CO_2) emissions	• To implement the Plan, which will contribute towards and facilitate climate action • To demonstrate successful implementation of measures relating to climate reduction targets – including the legally binding targets of the Climate Action and Low Carbon Development Act 2015, as amended, for Ireland to reach a target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels).	• Internal review of Plan implementation • EPA Annual National Greenhouse Gas Emissions Inventory reporting • Climate Action Regional Office • Consultations with Department of Environment, Climate and Communications • CSO data • As part of the Plan, the NTA and DCC will implement an expanded annual monitoring inside the Canals of: Canal Cordon counts of travel by all modes; Liffey Bridge counts of travel by all modes; Public transport journey times through the City Centre; and Public transport passenger numbers.	• Review internal systems • Where targets are not achieved, the Authority will liaise with the Authorities (and the Regional Assembly, the Dublin Climate Action Regional Office, DHLGH and DECC as relevant) to establish reasons and develop solutions. • Where trends toward carbon reduction are not recorded, the Authorities will liaise with the Regional Assembly, the Dublin Climate Action Regional Office, DHLGH and DECC, as relevant, to establish reasons and develop solutions.
		• A competitive, low-carbon, climate-resilient and environmentally sustainable economy	• Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050		
		• Share of renewable energy in transport	• Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan		
		• Energy consumption, the uptake of renewable options and solid fuels for	• To promote reduced energy consumption and support the uptake of		

[96] Please also refer to relevant legislation and requirements under Section 4.5, Section 8, Section 9 and Appendix I.

Environmental Component	SEO Code	Indicators	Targets	Selection of Sources that may be used	Remedial Action
		residential heating	renewable options and a move away from solid fuels for residential heating		
		• Proportion of journeys made by private fossil fuel-based car compared to previous levels	• Decrease in the proportion of journeys made by residents of the County using private fossil fuel-based car compared to previous levels		
		• Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	• Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures		
Population and Human Health	**PHH**	• Implementation of the Plan, which will contribute towards and facilitate economic growth	• To implement the Plan, which will contribute towards and facilitate economic growth	• Consultations with the Health Service Executive and EPA • CSO data • Internal review of Plan implementation. • As part of the Plan, the NTA and DCC will implement an expanded annual monitoring inside the Canals of Air Quality and Noise. DCC and the NTA will monitor potential adverse effects relating primarily to Air Quality and Noise due to the displacement of traffic arising out of Plan measures on a regular basis in the context of the wider benefits that are forecast to accrue from the Plan, and mitigate any negative impacts that may emerge, as appropriate. • As part of the Plan, the NTA and DCC will implement an expanded annual monitoring inside the Canals of: Canal Cordon counts of travel by all modes; Liffey Bridge counts of travel by all modes; Public transport journey times through the City Centre; and Public transport passenger numbers.	• Review internal systems • Consultations with the Health Service Executive and EPA • Where proportion of population shows increase in private car use above previous CSO figures, coordinate with the Regional Assembly, the Dublin Climate Action Regional Office, DHLGH and DECC, as relevant to develop a tailored response
		• Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan	• No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan		
		• Proportion of people reporting regular cycling / walking to school and work above previous CSO figures • Access to sustainable modes of transport	• Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures • To improve access to sustainable modes of transport		
Biodiversity, Flora and Fauna	**BFF**	• Condition of European sites	• Relevant projects to integrate considerations relating to European sites, other nature conservation sites, ecological networks, protected species and ecosystem services • Relevant projects to have regard to the heritage and biodiversity plans of planning authorities	• Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). • Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the under Article 12 (every 6 years) • Consultations with the NPWS • Internal review of new projects	• Review internal systems • Where condition of biodiversity and flora and fauna is found to be deteriorating this will be investigated with the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.
		• Number of projects that have integrated ecosystem services considerations	• Relevant projects to integrate considerations relating to ecosystem services		
		• EIAs and AAs as relevant for new projects	• Screen for and undertake EIA and AA as relevant for new projects		

Environmental Component	SEO Code	Indicators	Targets	Selection of Sources that may be used	Remedial Action
		• Compliance of planning permissions with Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 21 of the Plan	• For new projects only to be progressed where they demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 21 of the Plan		
Material Assets	**MA**	• See also indicator relating to the existing built-up footprint of the City under Soil • Proportion of people reporting regular cycling / walking to school and work above previous CSO figures • Access to sustainable modes of transport	• See also target relating to the existing built-up footprint of the City under Soil • Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures • To improve access to sustainable modes of transport	• Internal review of Plan implementation • CSO data • As part of the Plan, the NTA and DCC will implement an expanded annual monitoring inside the Canals of: Canal Cordon counts of travel by all modes; Liffey Bridge counts of travel by all modes; Public transport journey times through the City Centre; and Public transport passenger numbers.	• Review internal systems • Where targets are not achieved, the Authorities will liaise with the Regional Assembly, the Dublin Climate Action Regional Office, DHLGH and DECC, as relevant, to establish reasons and develop solutions.
Soil (and Land)	**S**	• To facilitate population growth occurring within the existing built-up footprint of the City (also relevant to Material Assets) • Instances where contaminated material generated from brownfield and infill must be disposed of	• To facilitate compliance with growth targets for delivery of housing within the existing built-up footprint of the City • Dispose of contaminated material in compliance with EPA guidance and waste management requirements	• Internal review of Plan implementation • Landcover data • CSO data	• Review internal systems • Where targets are not achieved, the Authorities will liaise with the Regional Assembly, the Dublin Climate Action Regional Office, DHLGH and DECC, as relevant, to establish reasons and develop solutions

Environmental Component	SEO Code	Indicators	Targets	Selection of Sources that may be used	Remedial Action
Water	**W**	• Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD • Number of incompatible developments permitted within flood risk areas • Integration of sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects	• Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' • Implementation of the objectives of the River Basin Management Plan • Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk • Integrate sustainable water management solutions (such as SuDS, porous surfacing, etc.) into new projects as relevant	• EPA Monitoring Programme for WFD compliance • Internal review of Plan implementation	• Where water bodies are failing to meet at least good status as a result of development under the Plan, this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Irish Water. A tailored response will be developed in consultation with these stakeholders in such a circumstance • Where marine water bodies are failing to meet good ecological status as a result of development under the Plan, this will be interrogated with the Marine Institute and the DHLGH. A tailored response will be developed in consultation with the Marine Institute and DHLGH in such a circumstance • Where new projects are on flood zones, these should be implemented in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures
Landscape	**L**	• Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in the City Development Plan, resulting from development which is granted permission under the Plan	• No schemes progressed that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in the City Development Plan, resulting from development which is granted permission under the Plan	• Internal review of Plan implementation	• Where monitoring reveals developments permitted that result in avoidable adverse visual impacts on the landscape, the Authorities will re-examine Plan provisions and the effectiveness of their implementation
Cultural Heritage	**CH**	• Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan	• Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan	• Internal review of Plan implementation • Consultation with Department of Housing, Local Government and Heritage	• Review internal systems • Find solutions, in consultation with the DHLGH as relevant

Appendix I Relationship with Legislation and Other Plans and Programmes

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

Legislation, Plan, etc.	Summary of high-level aim / purpose / objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
International / European Level			
SEA Directive (2001/42/EC)	• Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. • Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment.	• Carry out and environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. • Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme. • Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission. • Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects. • Inform relevant authorities and stakeholders on the decision to implement the plan or programme. • Issue a statement to include requirements detailed in Article 9 of the Directive. • Monitor and mitigate significant environmental effects identified by the assessment.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	• Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment. • Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.	• All projects listed in Annex I are considered as having significant effects on the environment and require an EIA. • For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III. • The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor. • Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)	• Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora. • Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora. • Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of community interest. • Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements.	• Propose and protect sites of importance to habitats, plant and animal species. • Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. • Carry out comprehensive assessment of habitat types and species present. • Establish a system of strict protection for the animal species and plant species listed in Annex IV.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Birds Directive (2009/147/EC)	• Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats. • Protect, manage and control these species and comply with regulations relating to their exploitation. • The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.	• Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. • Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas). • Ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes. • Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	• Reducing water pollution caused or induced by nitrates from agricultural sources and – preventing further such pollution.	Ireland's Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland's third NAP came into operation in 2014. Each Member State's NAP must include: • a limit on the amount of livestock manure applied to the land each year • set periods when land spreading is prohibited due to risk • set capacity levels for the storage of livestock manure	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high-level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
			framework for environmental protection and management.
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	• The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions.	The IPPC Directive is based on several principles: • an integrated approach • best available techniques, • flexibility; and • public participation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Plant Protection (products) Directive 2009/127/EC	• The Directive aims at reducing the risks and impacts of pesticide use on human health and • the environment by introducing different targets, tools and measures such as Integrated Pest • Management (IPM) or National Action Plans (NAPs).	• The Framework Directive applies to pesticides which are plant protection products. • Regarding pesticide application equipment already in professional use, the Framework Directive introduces requirements for the inspection and maintenance to be carried out on such equipment.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
2018 EU Renewables Directive (2018/2001)	• This Directive sets an overall European renewable energy target of 32% by 2030 and includes rules to ensure the uptake of renewables in the transport sector and in heating and cooling. On 30 March 2023, a provisional agreement was reached for a binding target of at least 42.5% by 2030, but aiming for 45%. Once this process is completed, the new legislation will be formally adopted and enter into force.	• The Directive sets common principles and rules for renewable energy support schemes, sustainability criteria for biomass and the right to produce and consume renewable energy and to establish renewable energy communities. It also establishes rules to remove barriers, stimulate investments and drive cost reductions in renewable energy technologies and empowers citizens and businesses to participate in the clean energy transformation.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Indirect Land Use Change Directive (2012/0288 (COD))	• Article 3(4) of Directive 2009/28/EC of the European Parliament and of the Council (3) requires Member States to ensure that the share of energy from renewable energy sources in all forms of transport in 2020 is at least 10 % of their final energy consumption. • The blending of biofuels is one of the methods available for Member States to meet this target, and is expected to be the main contributor. • Other methods available to meet the target are the reduction of energy consumption, which is imperative because a mandatory percentage target for energy from renewable sources is likely to become increasingly difficult to achieve sustainably if overall demand for energy for transport continues to rise, and the use of electricity from renewable energy sources.	• Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive; • Improve the greenhouse gas performance of biofuel production processes (reducing associated emissions) by raising the greenhouse gas saving threshold for new installations subject to protecting installations already in operation on 1st July 2014; • Encourage a greater market penetration of advanced (low-ILUC) biofuels by allowing such fuels to contribute more to the targets in the Renewable Energy Directive than conventional biofuels; • Improve the reporting of greenhouse gas emissions by obliging Member States and fuel suppliers to report the estimated indirect land-use change emissions of biofuels.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Alternative Fuels Infrastructure Directive (2014/94/EU)	• This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport.	• This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Energy Efficiency Directive (2012/27/EU)	• Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. • Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption.	• Energy distributors or retail energy sales companies have to achieve 1.5% energy savings per year through the implementation of energy efficiency measures • EU countries can opt to achieve the same level of savings through other means, such as improving the efficiency of heating systems, installing double glazed windows or insulating roofs • The public sector in EU countries should purchase energy efficient buildings, products and services • Every year, governments in EU countries must carry out energy efficient renovations on at least 3% (by floor area) of the buildings they own and occupy	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

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		• Energy consumers should be empowered to better manage consumption. This includes easy and free access to data on consumption through individual metering • National incentives for SMEs to undergo energy audits • Large companies will make audits of their energy consumption to help them identify ways to reduce it • Monitoring efficiency levels in new energy generation capacities.	framework for environmental protection and management.
EU Seveso Directive (2012/18/EU)	• This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.	The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas: • Classification, labelling and packaging of chemicals; • The Union's Civil Protection Mechanism; • The Security Union Agenda including CBRN-E and Protection of critical infrastructure; • Policy on environmental liability and on the protection of the environment through criminal law; • Safety of offshore oil and gas operations.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	The EU's biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030, and contains specific actions and commitments.	The Strategy contains specific commitments and actions to be delivered by 2030, including: • Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value. • An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss. • A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision-making. • Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	• Promoting GI in the main EU policy areas. • Supporting EU-level GI projects. • Improving access to finance for GI projects. • Improving information and promoting innovation.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage	• links concepts of nature conservation and the preservation of cultural properties; and • recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.	• sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them; • each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage; • encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN (1992) The Convention on Biological Diversity	An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.	The Convention has three main goals: • the conservation of biological diversity (or biodiversity); • the sustainable use of its components; and • the fair and equitable sharing of benefits arising from genetic resources.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN (1992) Framework Convention on Climate Change	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-

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			combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions. The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol. At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.	• The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II). • EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP. • Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2020 Climate and Energy Package	• Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020. • Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels. • Aims to raise the share of EU energy consumption produced from renewable resources to 20%. • Achieve a 20% improvement in the EU's energy efficiency.	Four pieces of complimentary legislation: • Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps. • Member States have agreed national targets for non-EU ETS emissions from countries outside the EU. • Meet the national renewable energy targets of 16% for Ireland by 2020. • Preparing a legal framework for technologies in carbon capture and storage.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2030 Framework for Climate and Energy	• A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries. • Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario.	To meet the targets, the European Commission has proposed the following policies for 2030: • A reformed EU emissions trading scheme (ETS). • New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries. • First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Clean Air for Europe Directive (2008/50/EC) **(EU Air Framework Directive)** **Fourth Daughter Directive (2004/107/EC)**	• The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive). • Sets new air quality objectives for $PM_{2.5}$ (fine particles) including the limit value and exposure related objectives. • Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values. • Allows the possibility for time extensions of three years (PM_{10}) or up to five years (NO_2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. • The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.	• Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole. • Aims to assess the ambient air quality in Member States on the basis of common methods and criteria. • Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and community measures. • Ensures that such information on ambient air quality is made available to the public. • Aims to maintain air quality where it is good and improving it in other cases. • Aims to promote increased cooperation between the Member States in reducing air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Directive (2002/49/EC)	The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.	The Directive requires competent authorities in Member States to: • Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels; • Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and • Inform and consult the public about noise exposure, its effects, and the measures considered to address noise. The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Floods Directive (2007/60/EC)	• Establishes a framework for the assessment and management of flood risks • Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community	• Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment • Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3. • Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above. • Inform the public and allow the public to participate in planning process.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Framework Directive (2000/60/EC)	• Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats. • Preserve and prevent the deterioration of water status and where necessary improve and maintain “good status” of water bodies. • Promote sustainable water usage. • The Water Framework Directive repealed the following Directives: o The Drinking Water Abstraction Directive o Sampling Drinking Water Directive o Exchange of Information on Quality of Surface Freshwater Directive o Shellfish Directive o Freshwater Fish Directive o Groundwater (Dangerous Substances) Directive o Dangerous Substances Directive	• Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive. • Achieve "good status" for all waters. • Manage water bodies based on identifying and establishing river basins districts. • Involve the public and streamline legislation. • Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas. • Establish a programme of monitoring for surface water status, groundwater status and protected areas. • Recover costs for water services.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Directive (2006/118/EC)	• Protect, control and conserve groundwater. • Prevent the deterioration of the status of all bodies of groundwater. • Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals.	• Meet minimum groundwater standards listed in Annex 1 of Directive. • Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Drinking Water Directive (98/83/EC)	• Improve and maintain the quality of water intended for human consumption. • Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	• Set values applicable to water intended for human consumption for the parameters set out in Annex I. • Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a). • Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5. • Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause. • Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action. • Undertake remedial action to restore the quality of the water where necessary to protect human health.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Urban Waste Water Treatment Directive (91/271/EEC)	• This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. • The objective of the Directive is to protect the environment from the adverse effects of waste water discharges.	• Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment. • Annex II requires the designation of areas sensitive to eutrophication which receive water discharges. • Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	• Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.	• Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent. • Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures. • Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7. • The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive. • The competent authority shall be entitled to initiate cost recovery proceedings against the operator. • The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met. • The Environmental Liability Directive has been amended through a number of Directives. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing knowledge and new needs.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	• The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.	The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	• The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co-operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.	• The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties. • The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co-operation between states and regions.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	• It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.	• (I) Document and understand industrial heritage structures, sites, areas and landscapes and their values; • (II) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes; • (III) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and • (IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	• Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time. • A heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action,	• Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights. • Recognise individual and collective responsibility towards cultural heritage. • Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal. • Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with

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	to sustain and transmit to future generations.	• Greater synergy of competencies among all the public, institutional and private actors concerned.	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Landscape Convention 2000	• The developments in agriculture, forestry, industrial and mineral production techniques, together with the practices followed in town and country planning, transport, networks, tourism and recreation, and at a more general level, changes in the world economy, have in many cases accelerated the transformation of landscapes. The Convention expresses a concern to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.	• Promote protection, management and planning of landscapes. • Organise European co-operation on landscape issues.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	It identifies three key objectives: • to protect, conserve and enhance the Union's natural capital • to turn the Union into a resource-efficient, green, and competitive low-carbon economy • to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing	Four so called "enablers" will help Europe deliver on these objectives (goals): • Better implementation of legislation. • Better information by improving the knowledge base. • More and wiser investment for environment and climate policy. • Full integration of environmental requirements and considerations into other policies. Two additional horizontal priority objectives complete the programme: • To make the Union's cities more sustainable. • To help the Union address international environmental and climate challenges more effectively.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	The convention has three main aims: • to conserve wild flora and fauna and their natural habitats • to promote cooperation between states • to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species	The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also: • Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control. • Look at implementing the Bern Convention in central Eastern Europe and the Caucus. • Take account of the potential impact on natural heritage by other policies. • Promote education and information of the public, ensuring the need to conserve species is understood and acted upon. • Develop an extensive number of species action plans, codes of conducts, and guidelines, at their own initiative or in co-operation with other organisations. • Created the Emerald Network, an ecological network made up of Areas of Special Conservation Interest.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bali Road Map (2007)	The overall goals of the project are twofold: • To increase national capacity to co-ordinate ministerial views, participate in the UNFCCC process, and negotiate positions within the timeframe of the Bali Action Plan; and • To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities.	The Bali Action Plan is centred on four main building Blocks: • mitigation • adaptation • technology • financing	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Cancun Agreements (2010)	Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover: • Mitigation • Transparency of actions • Technology • Finance • Adaptation • Forests • Capacity building	Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Doha Climate Gateway (2012)	Set of decisions taken at the COP 18 meeting in Doha in 2012 which pave the way for a new agreement in Paris in 2015.	• Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020); • Complete the work under Bali Action Plan and to focus on new completing new targets; • Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt; • Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with

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		• Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries.	other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Common Agricultural Policy	• To improve agricultural productivity, so that consumers have a stable supply of affordable food; and • To ensure that EU farmers can make a reasonable living.	• ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future; • Climate change and sustainable management of natural resources; • Looking after the countryside across the EU and keeping the rural economy alive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU REACH Regulation (EC 1907/2006)	• Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.	The aims are achieved by applying REACH, namely: • Registration, • Evaluation, • Authorisation; and • Restriction of chemicals. REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Stockholm Convention	• The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants.	• Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced Persistent Organic Pollutants (POPs) that are listed in Annex A to the Convention • Restrict the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex B to the Convention • Reduce or eliminate releases from unintentionally produced POPs that are listed in Annex C to the Convention • Ensure that stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner • To target additional POPs • Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ramsar Convention	The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".	Under the "three pillars" of the Convention, the Contracting Parties commit to: • Work towards the wise use of all their wetlands; • Designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management; • Cooperate internationally on transboundary wetlands, shared wetland systems and shared species.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European 2020 Strategy for Growth	Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities: • Smart growth: developing an economy based on knowledge and innovation; • Sustainable growth: promoting a more resource efficient, greener and more competitive economy; • Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.	In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020: 1. 75 % of the population aged 20-64 should be employed; 2. 3% of the EU's GDP should be invested in R&D; 3. the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); 4. the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 5. 20 million less people should be at risk of poverty.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Parliament resolutions, including: The European Green Deal (EGD) 2020	The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind.	• It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution. • It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition. • In order to meet the goal to become climate neutral by 2050 as part of the European	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with

Legislation, Plan, etc.	Summary of high-level aim / purpose / objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
		Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050.	all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU (2020) Biodiversity Strategy	A long-term plan for protecting nature and reversing the degradation of ecosystems across the European Union.	The Strategy contains specific commitments and actions to be delivered by 2030, including: • Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value. • An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss. • A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision-making. • Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030, and contains legislative proposals to implement stricter standards for emissions and air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Leaders Pledge for Nature 2020	Political leaders (including Taoiseach Michael Martin) participating in the United Nations Summit on Biodiversity in September 2020, representing 75 countries from all regions and the European Union, have committed to reversing biodiversity loss by 2030.	As part of the UN Decade of Action to achieve sustainable development, the leaders commit to achieve the vision of Living in Harmony with Nature by 2050 by undertaking ten actions, including: • Putting biodiversity, climate, and the environment at the heart of COVID-19 recovery strategies and investments as well as national and international development and cooperation; • Developing and implementing an ambitious and transformational post-2020 global biodiversity framework for adoption at the 15th meeting of the Conference of the Parties (COP 15) to the UN Convention on Biological Diversity (CBD) in Kunming, China, as a key instrument to reach the SDGs; • Raising ambition and aligning domestic climate policies with the Paris Agreement on climate change, with enhanced nationally determined contributions (NDCs) and long-term strategies consistent with the temperature goals of the Paris Agreement, and the objective of net zero greenhouse gas (GHG) emissions by mid-century, and strengthen climate resilience of economies and ecosystems; and • Mainstream biodiversity into relevant sectoral and cross-sectoral policies at all levels, including in food production, agriculture, fisheries and forestry, energy, tourism, infrastructure and extractive industries, and trade and supply chains, as well as into key international agreements and processes.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Level			
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	• Outlines a policy for how a sustainable travel and transport system can be achieved. • Sets out five key goals: o To reduce overall travel demand. o To maximise the efficiency of the transport network. o To reduce reliance on fossil fuels. o To reduce transport emissions. • To improve accessibility to transport.	• Others lower level aims include: o reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment o ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking o improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies strengthening institutional arrangements to deliver the targets	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Investment Framework for Transport in Ireland	The high-level strategic framework for prioritising future investment in the land transport network. This new framework is the Department of Transport's contribution to Project Ireland 2040, Government's long-term strategy for accommodating population growth in a sustainable manner and making Ireland	The framework establishes high-level investment priorities to efficiently and effectively address key transport challenges identified by the background analysis and to ensure that transport investment is aligned with and supports Government's overarching spatial and climate change objectives, as articulated in the National Planning Framework and Climate	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise.

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	a better country for all of its people. It has been developed to ensure that our transport sectoral strategy is underpinned by and supports the achievement of the spatial objectives and National Strategic Objectives set out in the National Planning Framework.	Action Plan.	Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Investing in our Future: A Strategic Framework for Investment in Land Transport (SFILT) – Department of Transport, Tourism and Sport	• SFILT sets out a set of priorities to guide the allocation of the State's investment to best develop and manage Ireland's land transport network over the coming decades.	The three priorities stated in SFILT are: • Priority 1: Achieve steady state maintenance (meaning that the maintenance and renewal of the existing transport system is at a sufficient level to maintain the system in an adequate condition); • Priority 2: Address urban congestion; and • Priority 3: Maximise the value of the road network. In delivering on the steady state maintenance objective set out in SFILT, the Plan includes for: • Planned replacement programme for the bus fleet operated under Public Service Obligation ("PSO") contracts; • Tram refurbishment and asset renewal in the case of light rail; and • To the extent within the Authority' remit, support for the operation of the existing rail network within the GDA.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Cycle Network Scoping Study 2010	• Outlines objectives and actions aimed at developing a strong cycle network in Ireland • Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	• Sets a target where 10% of all journeys will be made by bike by 2020 Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	• This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer-term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable. • By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors.	Targets for alternative fuel infrastructure include the following: • AFV forecasts • Electricity targets • Natural gas (CNG, LNG) targets • Hydrogen targets • Biofuels targets • LPG targets • Synthetic and paraffinic fuels targets	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland 2040 - Our Plan, the National Planning Framework and the National Development Plan (2021-2030)	• The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. • The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.	National Strategic Outcomes as follows: 1. Compact Growth 2. Enhanced Regional Accessibility 3. Strengthened Rural Economies and Communities 4. Sustainable Mobility 5. A Strong Economy, supported by Enterprise, Innovation and Skills 6. High-Quality International Connectivity 7. Enhanced Amenity and Heritage 8. Transition to a Low-Carbon and Climate-Resilient Society 9. Sustainable Management of Water and other Environmental Resources 10. Access to Quality Childcare, Education and Health Services	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning, Land Use and Transport Outlook 2040	The PLUTO takes account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies	The PLUTO seeks to: 1. Quantify in broad terms the appropriate scale of financial investment in land transport over the long term; 2. Consider how fiscal, environmental and technological developments might impact on this investment; and, 3. Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Planning and Development Act 2000 (as amended)	• The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2009 with specific regard given to supporting economic renewal and sustainable development.	• Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas. • There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission. • Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large-scale projects. • Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	• The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive.	• The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning. • These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning. • Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	• These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.	• They provide, among other things, for: the appointment and functions of authorized officers; identification, classification and other procedures relative to the designation of Community sites. • The Regulations have been prepared to address several judgments of the CJEU against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waste Management Act 1996, as amended	• To make provision in relation to the prevention, management and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	• The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (FPM) Regulations 2009 (S.I 296 of 2009)	• The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	• Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997). • Require the production of sub-basin management plans with programmes of measures to achieve these objectives. • Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I 9 of 2010), as amended (S.I. No. 366 of 2016)	• To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values. • Part A of Schedule 6 has been amended to include changes to the rules governing the determination of background levels for the purposes of establishing threshold values for groundwater pollutants and indicators of pollution. • Part B of Schedule 6 has been amended to include nitrites and phosphorus (total) / phosphates among the minimum list of pollutants and their indicators which the Environmental Protection Agency (EPA) must consider when establishing threshold values.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and

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		• Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established.	management.
European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	• These Regulations, which give effect to Ireland's 3rd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources	The Regulations include measures such as: • Periods when land application of fertilisers is prohibited • Limits on the land application of fertilisers • Storage requirements for livestock manure; and • Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Sustainable Development Goals National Implementation Plan (2018 – 2020)	• National Implementation Plan 2018 - 2020 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). • The Plan provides an 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also includes an 'SDG Policy Map' indicating the relevant national policies for each of the targets.	The Plan identifies four strategic priorities to guide implementation: • Awareness: raise public awareness of the SDGs; • Participation: provide stakeholders opportunities to engage and contribute to follow-up and review processes, and further develop national implementation of the Goals; • Support: encourage and support efforts of communities and organisations to contribute towards meeting the SDGs, and foster public participation; and • Policy alignment: develop alignment of national policy with the SDGs and identify opportunities for policy coherence.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Infrastructure and Capital Investment Plan (2016-2021)	• €27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to 2021 will help to lay the foundations for continued growth in Ireland.	• This Capital Plan reflects the Government's commitment to supporting strong and sustainable economic growth and raising welfare and living standards for all. • It includes allocations for new projects across a number of key areas and funding to ensure that the present stock of national infrastructure is refreshed and maintained.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	• The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.	• The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for Renewable Energy (2012-2020)	• The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most cost-efficient manner for consumers. • Of critical importance is the role which the renewable energy sector plays in job creation and economic activity as part of the Government's action plan for jobs.	This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020: • Increasing on and offshore wind, • Building a sustainable bioenergy sector, • Fostering R&D in renewables such as wave & tidal, • Growing sustainable transport; and • Building out robust and efficient networks.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.	2030 will represent a significant milestone, meaning: Reduced GHG emissions from the energy sector by between 80% and 95% Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

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			framework for environmental protection and management.
National Policy Position on Climate Action and Low Carbon Development (2014)	• The National Policy Position provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low carbon economy by 2050. • Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015.	National climate policy in Ireland: • Recognises the threat of climate change for humanity; • Anticipates and supports mobilisation of a comprehensive international response to climate change, and global transition to a low-carbon future; • Recognises the challenges and opportunities of the broad transition agenda for society; and • Aims, as a fundamental national objective, to achieve transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action and Low Carbon Development Act 2015, as amended	• An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.	When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to: • The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment entered into by the European Union in response or otherwise in relation to that objective, • The policy of the Government on climate change, • Climate justice, • Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Climate Action Plan 2023 and Climate Action Plan 2024	The National Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021. The emerging Climate Action Plan 2024 builds upon the 2023 Plan by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings.	The Climate Action Plans list the actions needed to deliver on Ireland's climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically to ensure alignment with Ireland's legally binding economy-wide carbon budgets and sectoral ceilings.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Clean Air Strategy [in preparation]	The Clean Air Strategy will provide the strategic policy framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	• Having a National Strategy will provide a policy framework by which Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation. • The Strategy should also help tackle climate change. • The Strategy will consider a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture. • In any discussion relating to clean air policy, the issue of people's health is paramount and this will be a strong theme of the Strategy.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EirGrid's Grid25 Strategy and associated Grid25 Implementation Programme 2017-2022	EirGrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland; "*Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way.*"	• Grid25, EirGrid's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand, and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
All Island Grid Study 2008	• The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources. • The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for	Key conclusions of the study: • The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study. • All but the high coal-based portfolio lead to significant reductions of CO_2 emissions compared to portfolio 1	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

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	increased shares of electricity sourced from renewable energy in the all island power system.	• All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports. • The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact. • Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered. • Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security.	cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for the Future Development of National and Regional Greenways (2018)	• The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. • It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.	• A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure; • Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism to Ireland and are regularly used by overseas visitors, domestic visitors and locals thereby contributing to a healthier society through increased physical activity; • Greenways that provide a substantially segregated off road experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and • Greenways that provide opportunities for the development of local businesses and economies, and • Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Water Resources Plan [in preparation]	• The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment. • The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment.	The key objectives of the plan are to: • Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions • Assess the current and future water demand from homes, businesses, farms, and industry • Consider the impacts of climate change on Ireland's water resources • Develop a drought plan advising measures to be taken before and during drought events • Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water • Identify, develop and assess options to help meet potential shortfalls in water supplies • Assess the water resources available at a national level including lakes, rivers and groundwater	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Strategic Plan for Aquaculture Development (2014-2020)	Vision: *"Aquaculture in RC is economically, socially and ecologically sustainable, with a developed infrastructure, strong human potentials and an organized market. The consumption of aquaculture products is equal or above EU average, while the technological development of the sector is among the best in the EU."*	General development and growth objectives of marine and freshwater aquaculture (2014 – 2020): • Strengthen the social, business and administrative environment for aquaculture development • Increase in the total production to 24,050 tonnes while adhering to the principles of economic, social and ecological sustainability • Improvement of the perception and increase in the national consumption of National products	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Construction 2020, A Strategy for a Renewed Construction Sector	• Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. • The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated.	This Strategy therefore addresses issues including: • A strategic approach to the provision of housing, based on real and measured needs, with mechanisms in place to detect and act when things are going wrong; • Continuing improvement of the planning process, striking the right balance between current and future requirements; • The availability of financing for viable and worthwhile projects; • Access to mortgage finance on reasonable and sustainable terms; • Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety; • Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and • Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Sustainable Development: A Strategy for Ireland (1997)	• The overall aim of this Strategy is to ensure that economy and society in Ireland can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community.	• The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and

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			cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	• The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high-level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions. • Landscape Strategy Vision: *"Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning."*	The objectives of the National Landscape Strategy are to: • Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; • Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; • Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; • Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Waste Policy 2020 – 2025	The Policy sets out new targets to tackle waste and move towards a circular economy.	The plan includes halving our food waste by 2030, the introduction of a deposit and return scheme for plastic bottles and cans, a ban on certain single use plastics from July 2021, and a levy on disposable cups. Other measures include applying green criteria and circular economy principles in all public procurement, a waste recovery levy to encourage recycling, and ensuring all packaging is reusable or recyclable by 2030.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Hazardous Waste Management Plan 2021-2027	This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period: • To prevent and reduce the generation of hazardous waste by industry and society generally; • To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste; • To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export; To minimise the environmental, health, social and economic impacts of hazardous waste generation and management.	The revised Plan makes 27 recommendations under the following topics: • Prevention • Collection • Self-sufficiency • Regulation • Legacy issues • North-south cooperation • Guidance and awareness • Implementation	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	• The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density.	• The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	• The vision is: *"A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone's responsibility."*	These four goals are interlinked, interdependent and mutually supportive: • Goal 1: Increase the proportion of people who are healthy at all stages of life • Goal 2: Reduce health inequalities • Goal 3: Protect the public from threats to health and wellbeing • Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges.	• Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	• White paper setting out a framework for delivering a sustainable energy future in Ireland. • Outlines strategic Goals for: o Security of Supply o Sustainability of Energy o Competitiveness of Energy Supply	The underpinning Strategic Goals are: • Ensuring that electricity supply consistently meets demand • Ensuring the physical security and reliability of gas supplies to Ireland • Enhancing the diversity of fuels used for power generation • Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks • Creating a stable attractive environment for hydrocarbon exploration and production • Being prepared for energy supply disruptions	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Adaptation Framework (NAF) 2018 and emerging National Adaptation Framework 2024 and associated regional, local and sectoral adaptation plans	• NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur	• Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. • Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance-based actions. • Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. • Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
2030 Climate and Energy Framework	Adopted October 2014, includes EU-wide targets and policy objectives for the period from 2021 to 2030.	Key targets for 2030: • At least 40% cut in greenhouse gas emissions (from 1990 levels). • At least 32% share for renewable energy. This was revised upwards in 2018. • At least 32.5% improvement in energy efficiency. This was revised upwards in 2018.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Renewable Energy Action Plan (2010)	• Sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Including Ireland's 16% target of gross final consumption to come from renewables by 2020.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Energy Efficiency Action Plan for Ireland (2009 – 2020)	• This is the second National Energy Efficiency Action Plan for Ireland.	• The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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National Energy & Climate Plan (NECP) 2021 – 2030	Irelands National Energy & Climate Plan (NECP) 2021-2030 takes into account energy and climate policies developed up to 2019, the levels of demographic and economic growth identified in the National Planning Framework - Project 2040 and includes all of the climate and energy measures as set out in the National Development Plan 2018-2027.	The planned policies and measures that were identified up to the end of 2019, collectively deliver a 30% reduction by 2030 in non-Emission Trading Systems greenhouse gas emissions (from 2005 levels). Ireland is committed to achieving a 7% annual average reduction in greenhouse gas emissions between 2021 and 2030. The NECP was drafted in line with the current EU effort-sharing approach, before the Government committed to this higher level of ambition, and therefore does not reflect this higher commitment. Ireland is currently developing those policies and measures and intends to integrate the revision of the NECP into the process which will be required for increasing the overall EU contribution under the Paris Agreement.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Wildlife Act of 1976 **Wildlife (Amendment) Act, 2000** **Wildlife (Amendment) Act, 2023**	The act provides protection and conservation of wild flora and fauna.	• Provides protection for certain species, their habitats and important ecosystems • Give statutory protection to NHAs • Enhances wildlife species and their habitats • Includes more species for protection	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's 4th National Biodiversity Action Plan 2023-2030	Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature. The 4th NBAP strives for a "whole of government, whole of society" approach to the governance and conservation of biodiversity. The aim is to ensure that every citizen, community, business, local authority, semi-state and state agency has an awareness of biodiversity and its importance, and of the implications of its loss, while also understanding how they can act to address the biodiversity emergency as part of a renewed national effort to "act for nature".	This 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	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Broadband Plan (2012)	• Sets out the strategy to deliver high speed broadband throughout Ireland.	The Plan sets out: • A clear statement of Government policy on the delivery of High-Speed Broadband. • Specific targets for the delivery and rollout of high-speed broadband and the speeds to be delivered. • The strategy and interventions that will underpin the successful implementation of these targets. • A series of specific complementary measures to promote implementation of Government policy in this area.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003) **European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)** **European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)**	• Transpose the Water Framework Directive into legislation. • Outlines the general duty of public authorities in relation to water. • Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions.	• Requires the public to be informed and consulted on the Plan and for progress reports to be published on River Basin Districts (RBDs). • Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies. • Allows the competent authority to recover the cost of damage/destruction of status of water body. • Outlines environmental objectives and programme of measures and environmental quality standards for priority substances. • Outlines criteria for assessment of groundwater. • Outlines environmental objectives to be achieved for surface water bodies. • Outlines surface water quality standards. • Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	• Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.	• Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality. • Sets groundwater quality standards. • Outlines threshold values for the classification and protection of groundwater.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and

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			management.
Water Pollution Acts 1977 to 1990	• The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.	The Water Pollution Acts enable local authorities to: • Prosecute for water pollution offences. • Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters. • Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution. • issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; • Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects. • Prepare water quality management plans for any waters in or adjoining their functional areas.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Services Act 2007 **Water Services (Amendment) Act 2012** **Water Services Act (No. 2) 2013**	• Provides the water services infrastructure. • Outlines the responsibilities involved in delivering and managing water services. • Identifies the authority in charge of provision of water and waste water supply. • Irish Water was given the responsibility of the provision of water and waste water services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland.	Key strategic objectives include: • Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. • Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced. • Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards • Ensuring the provision of the remaining infrastructure needed to provide secondary waste water treatment, for compliance with the requirements of the EU Urban Waste water Treatment Directive. • Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures. • Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. • Ensuring a fair funding model to deliver water services. • Overseeing the establishment of an economic regulation function under the CER.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	• This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.	Six strategic objectives as follows: • Meet Customer Expectations. • Ensure a Safe and Reliable Water Supply. • Provide Effective Management of Waste water. • Protect and Enhance the Environment. • Support Social and Economic Growth. • Invest in the Future.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Rural Development Programme	The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	At a more detailed level, the programme also: • Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; • Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and • Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
River Basin Management Plan	• The River Basin Management Plan sets out the measures planned to maintain and improve the status of waters.	• Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive. • Identify and manages water bodies in the RBD. • Establish a programme of measures for monitoring and improving water quality in the RBD. • Involve the public through consultations.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	• The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.	CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows: • Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner.	Three high level goals, of equal importance, based on the concept of sustainable development are identified: • To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs. • To increase awareness of the value, opportunities and societal benefits of developing bioenergy. • To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: • AFV forecasts • Electricity targets • Natural gas (CNG, LNG) targets • Hydrogen targets • Biofuels targets • LPG targets • Synthetic and paraffinic fuels targets	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Action Plan 2019-2021	The Tourism Action Plan 2019-2021 sets out actions that the Tourism Leadership Group has identified as priorities to be progressed until 2021 in order to maintain sustainable growth in overseas tourism revenue and employment. Each action involves specific tourism stakeholders, both in the public and private sectors, all of whom we expect to proactively work towards the completion of actions within the specified timeframe.	The Plan contains 27 actions focusing on the following areas: • Policy Context • Marketing Ireland as a Visitor Destination • Enhancing the Visitor Experience • Research in the Irish Tourism Sector • Supporting Local Communities in Tourism • Wider Government Policy • International Context • Co-ordination Structures	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	The Tourism Policy Statement sets three headline targets to be achieved by 2025: • Overseas tourism revenue of €5 billion per year • net of inflation excluding carrier receipts; • 250,000 people employed in tourism; and • 10 million overseas visitors to Ireland per year.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Draft Renewable Electricity Policy and Development Framework (DCCAE)	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála. Methodology: Development of the Policy and Development Framework is to be informed by the carrying out of an SEA, including widespread consultation with stakeholders and public, and with AA under the Habitats Directive.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waterways Ireland Heritage Plan 2016-2020	The overarching aim of the Plan is to: *"Identify and protect the unique waterways heritage and promote its sustainable use for the enjoyment of this and future generations".*	Four objectives of the Plan include the following: • Objective 1: Fostering partnerships to continue building waterway heritage knowledge through storing information, undertaking research and developing best practice. • Objective 2: Promoting awareness, appreciation and enjoyment of our waterway heritage with a focus on community engagement. • Objective 3: Promoting the integrated management, conservation, protection and sustainable use of the inland navigable waterway asset. • Objective 4: To develop Waterways Ireland as a heritage organisation committed to achieving the aim of this plan.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Development and Innovation – A Strategy for Investment 2016-2022, (Fáilte Ireland, 2016)	This strategy sets out the framework and mechanism for the delivery of investment to cities, towns, villages, communities and businesses across the country. It identifies priorities to support innovation in the sector to retain and grow the country's competitiveness in the marketplace. Its ultimate aim is to strengthen the appeal of Ireland for international visitors.	The objectives of the Tourism Development and Innovation Strategy are: • To successfully and consistently deliver a world class visitor experience; • To support a tourism sector that is profitable and achieves sustainable levels of growth and delivers jobs; • To facilitate communities to play an enhanced role in developing tourism in their locality, thereby strengthening and enriching local communities; and • To recognise, value and enhance Ireland's natural environment as the cornerstone of Irish tourism.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
All Ireland Pollinator Plan 2021-2025	The All-Ireland Pollinator Plan is an island-wide attempt to reverse declines in pollinating insects to ensure the sustainability of our food, avoid additional economic impacts on agriculture, and protect the health of the environment. The main objectives include: • Making farmland, public land and private land in Ireland pollinator friendly; • Raising awareness of pollinators and how to protect them; • Managed pollinators – supporting beekeepers and growers; • Expanding our knowledge of pollinators and pollination service; and • Collecting evidence to track change and measure success.	This voluntary Plan identified 81 actions, shared out between over 100 governmental and non-governmental organisations. A large focus of the Plan is to identify actions to improve the quality and amount of flower-rich habitat. Actions range from creating pollinator highways along our transport routes, to supporting pollinators on farmland, in gardens, businesses, and on public land.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Waste Management Plan for a Circular Economy 2024	The Regional Waste Management Planning Offices, under the auspices of the County and City Management Association National Oversight Group, have co-ordinated the preparation of this plan which is the first National Waste Management Plan for a Circular Economy. This Plan sets out a framework for the prevention and management of waste in Ireland for the period 2024 to 2030.	The Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional / County / Local Level			
Eastern and Midland Regional Economic and Spatial Strategy 2019-2031	The Regional Spatial and Economic Strategy provides a long-term strategic planning and economic framework for the Eastern and Midlands Region in order to support the implementation of the National Planning Framework.	The Eastern and Midland Regional Economic and Spatial Strategy includes provisions for its 12 constituent local authorities: Fingal County Council; Dublin City Council; South Dublin County Council; Dún Laoghaire-Rathdown County Council; Louth County Council; Kildare County Council; Meath County Council; Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Integrated Implementation Plan 2019-2024	The priorities in the Integrated Infrastructure Plan align with the objectives and priorities set out in the Greater Dublin Transport Strategy 2016-2035, focused on improving public and sustainable transport. While the bulk of the Plan relates solely to the Greater Dublin Area, certain areas such as public transport services and activities related to small public service vehicles are dealt with on a national basis.	The Implementation Plan identifies investment proposals for a number of areas including: • Bus • Light Rail; • Heavy Rai; • Integration Measures and Sustainable Transport Investment; • Integrated Service Plan; and • Integration and Accessibility.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Greater Dublin Area Transport Strategy 2022-2042	• This Strategy sets out how transport will be developed across the Greater Dublin Area, covering Dublin, Meath, Wicklow and Kildare. • This Transport Strategy for the Greater Dublin Area 2022- 2042 (Transport Strategy) replaces the previous framework, titled the Transport Strategy for the Greater Dublin Area 2016- 2035, which was approved by the then Minister for Transport, Tourism and Sport in 2016. • The vision is: "*To provide a sustainable, accessible and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports the regional economy.*" • Full SEA and Stage 2 AA have been undertaken on this Strategy.	Strategy Objectives: • An Enhanced Natural and Built Environment To create a better environment and meet our environmental obligations by transitioning to a clean, low emission transport system, reducing car dependency, and increasing walking, cycling and public transport use, and reducing car dependency. • Connected Communities and Better Quality of Life To enhance the health and quality of life of our society by improving connectivity between people and places, delivering safe and integrated transport options, and increasing opportunities for walking and cycling. • A Strong Sustainable Economy To support sustainable economic activity and growth by improving the opportunity for people to travel for work or business where and when they need to, and facilitating the efficient movement of goods. • An Inclusive Transport System To deliver a high quality, equitable and accessible transport system, which caters for the needs of all members of society.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include: • To identify and evaluate the features of interest for a site • To set clear objectives for the conservation of the features of interest • To describe the site and its management • To identify issues (both positive and negative) that might influence the site • To set out appropriate strategies/management actions to achieve the objectives	• Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected. • These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Protection Schemes	A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	• A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Land Use Plans (including Development Plans, Local Area Plans and Strategic Development Zone Planning Schemes in force within the Plan area and in other adjoining planning authorities), such as such as the Dublin City Development Plan 2022-2028	• Outline planning objectives for land use development. • Strategic framework for planning and sustainable development including those set out in National Planning Framework and the Regional Economic and Spatial Strategy. • Set out the policies and proposals to guide development in the relevant area.	• Identify future infrastructure, development and zoning required. • Protect and enhances amenities and environment. • Guide planning authority in assessing proposals. • Aim to guide development in the area and the amount of nature of the planned development. • Aim to promote sustainable development. • Provide for economic development and protect natural environmental, heritage.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Local Economic and Community Plans (LECPs) prepared by Local Authorities within the Strategy area and Local Authorities in adjoining counties	• The overarching vision for each LECP is: "to promote the well-being and quality of life of citizens and communities	• The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Landscape Character Assessments within the Strategy area and in adjoining counties	Characterises the geographical dimension of the landscape.	• Identifies the quality, value, sensitivity and capacity of the landscape area. • Guides strategies and guidelines for the future development of the landscape.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Air Quality Plans prepared by Local Authorities	For the purposes of air quality assessment and management in Ireland, the country is divided into a number of zones, one of which is Agglomeration A - the Dublin Conurbation. This consists of the functional areas of Dublin City Council, South Dublin County Council, Dun Laoghaire – Rathdown County Council and most of Fingal County Council. These local authorities are obliged to prepare an air quality plan to identify the root causes and formulate measures to address the exceedance of that pollutant for submission to the EU within two years of the exceedance being reported i.e. the end of 2021.	The Dublin Region Air Quality Plan 2021 - Air Quality Plan sets out 14 broad measures and a number of associated actions to address the exceedance of the nitrogen dioxide annual limit value.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Action Plans and Air Quality Plans prepared by Local Authorities	Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to meeting the requirements of the Directive in Ireland.	The main purpose of Noise Action Plans is to: Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects Reduce noise, where possible, and maintain the environmental acoustic quality where it is good.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action Plans prepared by Local Authorities	Dublin City Council's Climate Action Plan, Climate Neutral Dublin 2030, sets out how the Council can promote a range of mitigation, adaptation and other climate action measures, to help deliver on the National Climate Action Plan and the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.	Climate Neutral Dublin 2030 sets out the actions that will be taken by the City Council to prepare the city and people living in it for the known impacts of climate change – flooding, sea level rise, extreme weather events, drought.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Adaptation Strategies prepared by Local Authorities	Dublin City Council's Climate Action Plan, Climate Neutral Dublin 2030, sets out how the Council can promote a range of mitigation, adaptation and other climate action measures, to help deliver on the National Climate Action Plan and the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.	Climate Neutral Dublin 2030 sets out the actions that will be taken by the City Council to prepare the city and people living in it for the known impacts of climate change – flooding, sea level rise, extreme weather events, drought.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high-level aim / purpose / objective	Summary of lower level objectives, actions etc.	Relevance to the Strategy
Local Authority Renewable Energy Strategies (LARES) prepared by Local Authorities	The Strategy sets out the framework for the delivery of sustainable and renewable energies throughout the County.	The LARES outlines the potential for a range of renewable energy resources and developments and acknowledges the significant contribution that they can make to the county in terms of energy security, reduced reliance on traditional fossil fuels, enabling future energy exports, meeting assigned national targets and the transition to a low carbon economy.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Eastern and Midlands Regional Waste Management Plan 2015-2021	These plans give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Fáilte Ireland Tourism plans, strategies, including those relating to the "Dublin" Brand, Regional Tourism Development Strategies and Destination Experience Development Plans	Fáilte Ireland's work includes preparing various plans and strategies for Ireland's Hidden Heartlands, the Wild Atlantic Way, Ireland's Ancient East and other brands and initiatives. These plans are subject to their own environmental assessment processes and any project arising is required to be consistent with and conform with the provisions of all adopted/approved Statutory Policies, Strategies, Plans and Programmes, including provisions for the protection and management of the environment.	Some of Fáilte Ireland's plans and strategies include various projects relating to land use and infrastructural development, including those relating to development of land or on land and the carrying out of land use activities. Many of these projects exist already while some are not currently in existence. The Statutory Policies, Strategies, Plans and Programmes that provide for different projects undergo a variety of environmental assessments. These assessments ensure that environmental effects are considered, including: those arising from new and intensified uses and activities; and those arising from various sectors such as tourism.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Various existing, planned and emerging projects provided for by the above plans and programmes, including those relating to transport infrastructure such as those related to the BusConnects Network, the Core Bus Corridor Programme, the New Dublin Area Bus Service Network, the MetroLink, DART+ and the Greater Dublin Area Cycle Network.	These projects have been provided for by higher-level plans and programmes.	These projects will contribute towards the development of the area to which the Plan relates and/or wider area and will contribute towards environmental protection and management.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in-combination effects (see Section 8.2) may arise. Implementation of the Strategy needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.