

SEA ENVIRONMENTAL REPORT APPENDIX II – NON-TECHNICAL SUMMARY

FOR

PROPOSED VARIATION No. 3 TO THE CORK CITY DEVELOPMENT PLAN 2022-2028

for: Cork City Council



Comhairle Cathrach Chorcaí
Cork City Council

by: CAAS Ltd.



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Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for Proposed Variation No. 3 to the Cork City Development Plan 2022-2028, as varied. The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Proposed Variation. The Environmental Report has been prepared as part of a Strategic Environmental Assessment (SEA) process for the Proposed Variation.

What is SEA?

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

Why is SEA needed? The Benefits

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

SEA has enabled the planning authority to direct development under the Proposed Variation towards what are generally robust, well-serviced and connected areas – thereby facilitating the general avoidance of incompatible development in the most sensitive, least well-serviced and least well-connected areas. This approach will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation

Compact development can be accompanied by placemaking initiatives to enable Cork City to become a more desirable place to live, work and visit.

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

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

How does the SEA work?

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

The SEA was scoped in consultation with designated environmental authorities.

What is included in the Environmental Report that accompanies the Proposed Variation?

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

Difficulties Encountered during the SEA process

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

What happens at the end of the process?

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

Section 2 The Proposed Variation

2.1 Background and Context

Following the approval of the Revised National Planning Framework ('NPF') in April 2025, Government published the 'NPF Implementation: Housing Growth Requirements Guidelines for Planning Authorities' in July 2025 ('the Guidelines') which set housing demand requirements for each local authority to 2040. There was no baseline uplift in housing growth requirement targets for Cork City Council in the Guidelines, but a provision of up to 50% additional provision applies.

Updating development plans cross the country is crucial to realising these housing growth requirements. Cork City Council intends to seek a two-year extension to the Cork City Development Plan 2022-2028 ('City Development Plan'), extending the plan period from August 2028 to December 2030, and proposes the amendments to the City Development Plan set out in Proposed Variation No. 3 in order to secure the objectives of the Guidelines and give effect to the housing growth requirements and additional provision to 2030.

The Guidelines require all local authorities to carry out a settlement capacity audit to identify zoned serviced and serviceable lands with residential development potential to cater for the housing growth requirement figures in all relevant settlements and to specify enabling infrastructure required. Cork City Council followed the methodology used for the city capacity study carried out to inform the current Cork City Development Plan 2022-2028 ('City Development Plan'), and its section 15(2)1 two-year progress report in 2024, to establish that there is approximately 450 hectares of zoned residential land identified in the Core Strategy with the potential to deliver approximately 22,500-36,000 dwellings at densities of 50 and 80 dwellings per hectare (dph), and depending on assumptions. 'Un-zoned' lands² in strategic locations that could contribute toward the sustainable, transport-oriented development of the city were also assessed.

To further inform Proposed Variation No. 3, Cork City Council carried out a non-statutory consultation inviting submissions from interested parties for recommendations for lands to be zoned for residential development that meet the criteria of the Guidelines, as well as the City Development Plan objectives for compact growth, transport-oriented development, serviceability and deliverability. Through this robust multi-stage process, Cork City Council determined that approximately 250 to 280 hectares of additional land for residential purposes are required to secure the objectives of the Guidelines to 2030.

As required under the Guidelines, a report from the Chief Executive setting out the development capacity of existing zoned lands and demonstrating the means by which it is proposed to secure the objectives of these Guidelines is published on the Cork City Council website.

2.2 Purpose of Proposed Variation No. 3

The main purpose of Proposed Variation No. 3 is to accelerate housing delivery and to align the City Development Plan with the Guidelines, but the Variation also seeks to amend the rural housing policy in order to align with updated Census data and includes minor amendments to update the City Development Plan in relation to Ministerial Guidelines issued since the adoption of the Plan in 2022.

2.3 Scope and Structure of Proposed Variation No. 3

Proposed Variation No. 3 comprises text and mapping changes to two of the four volumes of the City Development Plan, and consists of the following:

Part A: Volume 1: Written Statement

1. Mapping and Miscellaneous
 - 1.1. Proposed Amendments to Chapter 2
 - 1.2. Proposed Amendments to Chapter 3
 - 1.3. Proposed Amendments to Chapter 10
 - 1.4. Proposed Amendments to Chapter 11
 - 1.5. Proposed Amendments to Chapter 12
 - 1.6. Proposed Amendments to Appendix 1
2. Rural Housing Policy
 - 2.1 Proposed Amendments to Chapter 3 (* different amendments to "1.2" above)
 - 2.2 Proposed Amendments to Chapter 6
 - 2.3 Proposed Amendments to Chapter 11 (* different amendments to "1.4" above)

Part B: Volume 2: Mapped Objectives

1. Proposed Zoning Amendments
2. Proposed Designation of "Long Term Strategic Development Lands"

2.4 Strategic work undertaken by the Council to ensure evidence-based planning

In preparing the Proposed Variation, information relating to various sectors, from different Departments within the Council and from different bodies and organisations, was gathered and analysed, contributing towards the development of evidence-led provisions. This work included: preparing this SEA Environmental Report; preparing a Screening for Appropriate Assessment; preparing an Addendum to the existing Plan's Strategic Flood Risk Assessment; and considering information on capacity/delivery with respect to existing and planned infrastructure. The undertaking of the SEA process was part of this strategic work and contributed towards the integration of environmental considerations into the Proposed Variation as summarised in Section 6 of this report.

2.5 Relationship with other relevant Plans and Programmes

It is important to note that when reading the Proposed Variation, the provisions of the City Development Plan are relevant and, in this regard, both documents should be read in tandem with each other. The existing City Development Plan to be varied sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Proposed Variation must comply with relevant higher-level strategic actions and will, in turn, guide lower-level strategic actions.

The First Revision of the National Planning Framework sets out Ireland's planning policy direction up to 2040. The National Planning Framework is to be implemented through Regional Spatial and Economic Strategies and lower tier Development Plans and Urban Area Plans. The Regional Spatial and Economic Strategy for the Southern Region sets out objectives for land use planning, tourism, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must, as relevant and appropriate, be implemented through the City Development Plan to be varied.

In order to be realised, projects included in the Proposed Variation (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework.

Section 3 The Environmental Baseline

3.1 Introduction

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

3.2 Likely Evolution of the Environment in the Absence of a Proposed Variation

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

As a result, there would be both:

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

3.3 Biodiversity and Flora and Fauna

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

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

Cork Harbour, the River Lee and associated water courses, estuaries, salt marshes, reedbeds and intertidal mudflats are of ecological importance, providing a habitat for a variety of plant and animal species including mosses, lichens and bats and act as a corridor for the movement of species between the surrounding countryside and urban areas. These areas contain many rare and threatened habitats and species of national and international importance, including those protected under the national and European legislation.

A network of urban green spaces, including gardens, parks, graveyards, amenity walks, hedgerows, railway lines and patches of woodland and scrub, provide habitats and ecological connectivity within the City and beyond.

Designated ecological sites within and close to the City Council's administrative area include European sites comprising two Special Areas of Conservation¹ (SACs) and one Special Protection Area² (SPA).

- Great Island Channel SAC (Site Code: 001058) - ³ c.1.40 km to the east of the City;
- Blackwater River (Cork/Waterford) SAC (Site Code: 002170)⁴ c.7 km to the north of the City; and
- Cork Harbour SPA (Site Code: 004030)⁵ partially within the eastern parts of the City.

SPAs and SACs within a 15 km buffer around the City are mapped on Figure 3.1.

Existing Problems

Ireland's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (NPWS/DHLGH, 2025) provides the most recent assessment of EU-protected habitats and species in Ireland. The report confirms that the overall conservation status of habitats remains poor, with 90% assessed as unfavourable and over half showing declining trends. While some species are better - 58% are in favourable status and many exhibit stable or improving trends - the report highlights that significant pressures persist, despite ongoing positive actions and targeted conservation measures.

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

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

Previous changes in land uses arising from human development have resulted in a loss of biodiversity and flora and fauna; however, legislative objectives governing biodiversity and fauna were not identified as being conflicted with.

3.4 Population and Human Health

The results of Census 2022 recorded a population of 224,004 persons within Cork City.

The First Revision of the NPF was approved and published in April 2025. It identified the need to plan for approximately 50,000 additional households per annum to 2040 at national level. Arising from this, the Government issued Guidelines entitled NPF Implementation: Housing Growth Requirements under Section 28 of the Planning and Development Act (2000 as amended) to implement and interpret the national targets at county level. In order to implement the objectives of these guidelines, including increased housing targets for Cork City, it is necessary to vary the Plan and increase the quantum of land zoned for residential purposes.

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

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

¹ SACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

² 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.

³ Sensitive features comprise: mudflats and sandflats not covered by seawater at low tide; and Atlantic salt meadows.

⁴ Sensitive features comprise: estuaries; mudflats and sandflats not covered by seawater at low tide; perennial vegetation of stony banks; Salicornia and other annuals colonising mud and sand; Atlantic salt meadows; Mediterranean salt meadows; water courses of plain to montane levels with the Ranunculus fluitans and Callitriche-Batrachion vegetation; old sessile oak woodlands with Ilex and Blechnum in the British Isles; alluvial forests with Alnus glutinosa and Fraxinus excelsior; freshwater pearl mussel; white-clawed crayfish; sea lamprey; brook lamprey; river lamprey; twaite shad; salmon; otter; and Killarney fern.

⁵ Sensitive features comprise: little grebe; great crested grebe; cormorant; grey heron; shelduck; teal; pintail; red-breasted merganser; oystercatcher; golden plover; grey plover; lapwing; dunlin; black-tailed godwit; bar-tailed godwit; curlew; redshank; black-headed gull; common gull; lesser black-backed gull; common tern; wigeon; shoveler; and wetland and waterbirds.

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.

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 City, especially where land uses occurred in the past in the absence of the high standards of today's environmental protection legislation.

Existing Problems

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

Sources of flood risk within the City include: coastal; fluvial; pluvial (rainwater); and surface drainage systems sources. There is historic and predictive evidence of flooding throughout the City.

3.5 Soil

The most dominant soil types⁶ surrounding the built-up areas⁷ of Cork City are brown earths (well-drained mineral soils, associated with high levels of natural fertility).

The GSI (Geological Survey Ireland) 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.

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. There are eight CGS identified in Cork City:

- Ballinlough Fields CGS (Site Code: CC001);
- Beaumont Quarry CGS (Site Code: CC002);
- Blackrock Diamond Quarry CGS (Site Code: CC003);
- Inniscarra Bar CGS (Site Code: CC004);
- Patrick's Hill CGS (Site Code: CC005);
- Shandon Tower CGS (Site Code: CC006);
- St. Finn Barre's Cathedral CGS (Site Code: CC007); and
- St. Joseph's Section CGS (Site Code: CC008).

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

⁶ All soil types belong to a Sub-Group and so in turn to one of the 11 soil Great Groups. Great Groups and Sub-Groups are a hierarchical arrangement of soils used for taxonomical classification (<http://gis.teagasc.ie/soils/soilguide.php>).

⁷ The built-up areas are mainly made up of urban soils. Urban soils are soils, which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas.

life/injury, flooding, pollution of watercourses and impacts upon aquatic biodiversity. The GSI have identified⁸ that most of the City has relatively low levels of landslide susceptibility, with moderate to high susceptibility found mainly along steep river valleys in the centre, north and south of the City.

Existing Problems

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

3.6 Water

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 that are currently unpolluted and improve polluted water bodies to *good status*.

The City lies within the catchment of Lee, Cork Harbour and Youghal Bay. This catchment includes the area drained by the River Lee and all streams entering tidal water in Cork Harbour and Youghal Bay and between Knockaverry and Templebreedy Battery. The main river within Cork City is the River Lee flowing west to east. Other waterbodies within the City include the Rivers Blackwater and Bandon, Glashaboy Estuary, Lee Estuary and Lough Mahon.

The current WFD status (2019-2024)⁹ of surface waterbodies that drain Cork City ranges from *good* to *moderate* to *poor*.

The WFD status (2019-2024) of groundwater underlying Cork City is currently generally identified as being of *good* status and meeting the objectives of the WFD. There is an area of *poor*¹⁰ status underlying Tramore Valley Park to the south of Cork City Centre - the groundwater underlying this area is currently not meeting the objectives of the WFD.

Subject to exemptions provided for by Article 4 of the WFD, water bodies of *moderate* and *poor* status will need improvement in order to comply with the objectives of the WFD.

Figure 3.3 illustrates the WFD surface and ground water status within and surrounding Cork City.

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

Flood risk management and drainage provisions are already in force through the Cork City Development Plan 2022-2028. Predictive flood risk mapping is available from the Office of Public Works and included in the accompanying Strategic Flood Risk Assessment. Sources of flood risk within Cork City include: coastal; fluvial; pluvial (rainwater); and surface drainage systems sources.

There is historic and predictive evidence of flooding throughout the City.

Existing Problems

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

There is elevated levels of flood risk from fluvial sources at various locations across Cork City. The preparation of the Proposed Variation, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Proposed Variation and the SEA.

⁸ <https://www.gsi.ie/en-ie/programmes-and-projects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx>

⁹ As per EPA's WFD Status 2019-2024 classification (<https://gis.epa.ie/EPAMaps/>).

¹⁰ Area underlying Waste Facility (W0012-03).

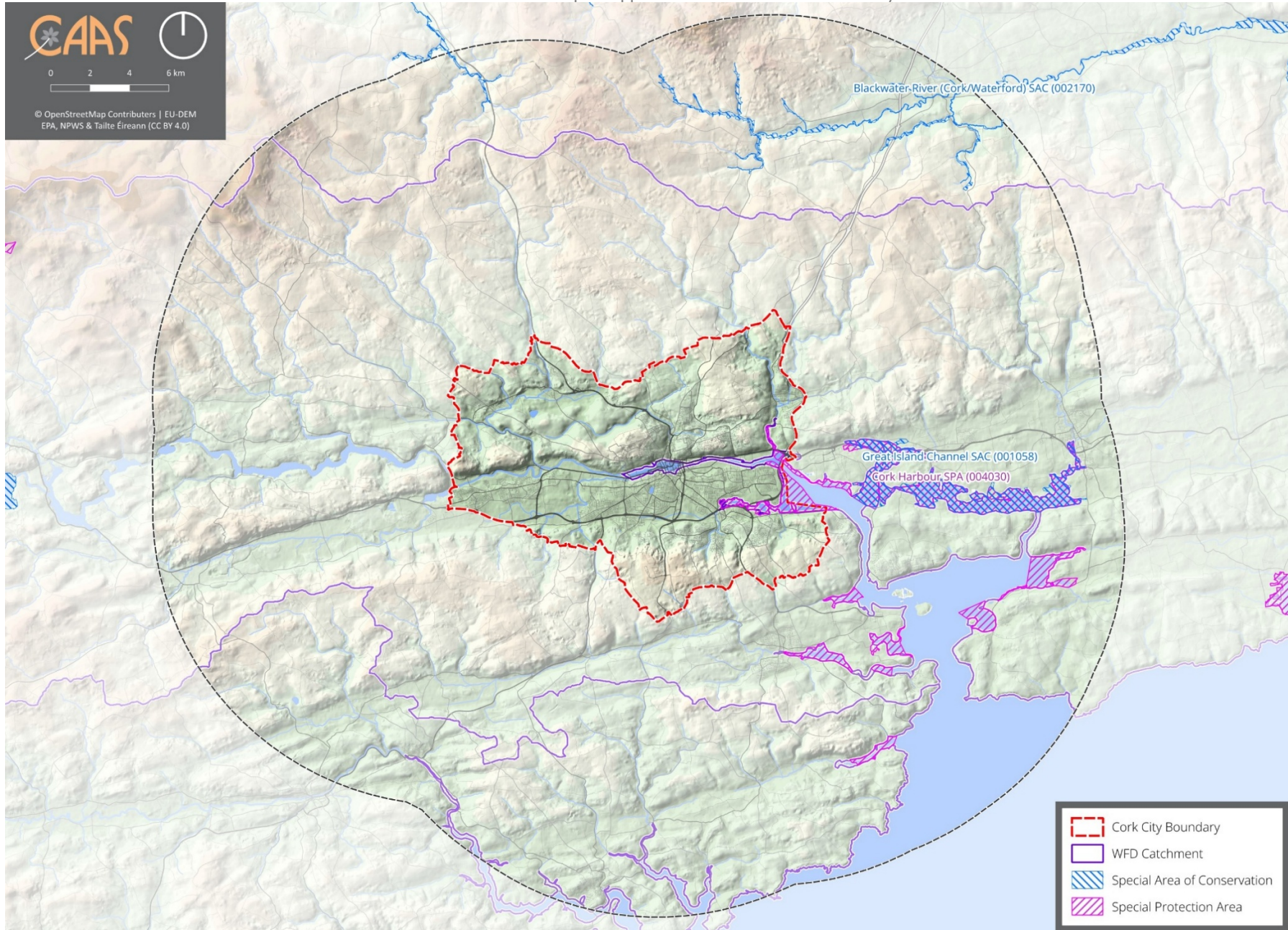


Figure 3.1 European Sites within and within 15 km buffer of Cork City

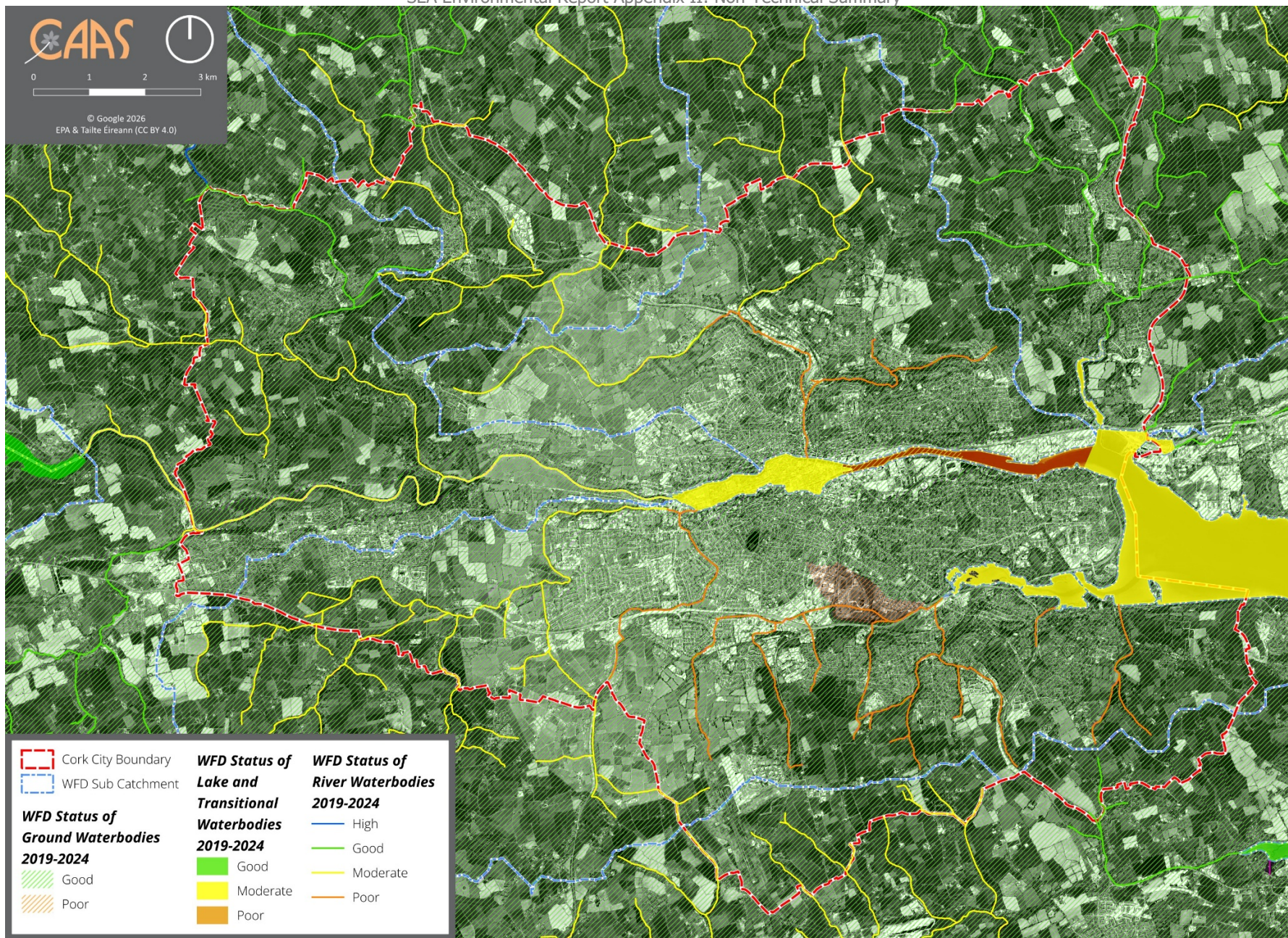


Figure 3.2 Surface and Ground Water Status (2019-2024)

3.7 Air and Climatic Factors

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

In 2023, Ireland's greenhouse gas emissions are estimated to be 55.01 million tonnes carbon dioxide equivalent (Mt CO₂ eq), which is 6.8% lower (or 4.00 Mt CO₂ eq) than emissions in 2022 (59.00 Mt CO₂ eq) and follows a 2.0% decrease in emissions reported for 2022. Emissions are 1.2% below the historical 1990 baseline for the first time in 33 years. In 2023, emissions in the stationary EU Emissions Trading System emissions (covering emissions from sectors including Agriculture, Transport, Energy, Industries, Residential, Manufacturing Combustion and Industrial Processes) decreased by 17%. When land use, land-use change and forestry is included, total national emissions decreased by 3.8%. Emissions under the Effort Sharing Regulation (covering emissions from the electricity and heat generation, industrial manufacturing and aviation sectors) decreased by 3.4%. Decreased emissions in 2023 compared to 2022 were observed in the largest sectors except for transport which showed an increase of 0.3%.

Climate mitigation describes the action to reduce the likelihood of climate change occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change. The National Climate Action Plan 2025 is the third statutory update to the plan since the Climate Action and Low Carbon Development (Amendment) Act 2021 was signed into law, committing Ireland to 2030 and 2050 targets for reducing greenhouse gas emissions. It builds on Climate Action Plan 2024, outlining how Ireland will accelerate the actions required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

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 (2024) aims to create a unified approach involving both government and society to adapt to climate change. It outlines how various sectors and local authorities can implement adaptation measures to minimise Ireland's vulnerability to climate change's adverse effects while taking advantage of any beneficial impacts. The Framework emphasises the importance of integrating adaptation strategies into all levels of policy making, infrastructure development, and local planning.

The Cork City Council Climate Action Plan 2024-2029 sets out mitigation, adaptation and other climate measures to create a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy in Cork City. The Climate Action Plan sets out five action areas:

- Governance and Leadership
- Communities and Partnership
- Built Environment and Energy
- Transport and Mobility
- Natural Environment and Resource Management

Cork City is an EU Climate-Neutral and Smart City and is regarded as a Decarbonising Zone. Cork City Council aims to become climate-neutral by 2030

The EPA's (2025) *Air Quality in Ireland 2024 Report* is based on data from Ireland's extensive air monitoring network of 115 stations. It reveals that, while Ireland currently meets EU air quality standards, it is projected to fall short of the stricter air quality standards set for 2030 under the new Ambient Air Quality Directive. The new EU Directive, part of the Zero Pollution Action Plan, aims to reduce premature deaths from air pollution by 55% by 2030. Ireland faces significant challenges in meeting these targets, with projected compliance levels of only 93 per cent for fine particulates (PM_{2.5}) and 78% for nitrogen dioxide (NO₂). Ireland also continues to fall short of achieving the more stringent World Health Organization health-based 2040 guidelines for several key pollutants. The report identifies that the primary sources of air pollution in Ireland are solid fuel burning and traffic emissions. The European Environment Agency estimates that in Ireland, more than 1,700 premature deaths annually are attributable to air pollution.

In order to apply with European Directives relating to air quality, the EPA manages the National Ambient Air Quality Network and measures the levels of a number of atmospheric pollutants at monitoring stations across the country.¹¹ There are six stations within Cork City.

Information on Particulate Matter (PM) monitoring is available for Cork City from the EPA. PM is the main pollutant of concern in Ireland. It is responsible for a broad range of health impacts and decreased quality of life. PM consists of very small particles which can be solid or liquid. Some of these particles occur naturally, and many are man-made. The EPA monitors two types of PM and compares levels to limit values in the Cleaner Air for Europe Directive and World Health Organisation guidelines. These are PM₁₀ and PM_{2.5}. In Ireland the main source – especially of the smaller and more impactful PM_{2.5} particles – is solid fuel burning for home heating. PM₁₀ particles are larger and can be made up of several sources, many of which can be natural sources such as pollen, or wind-blown sea salt and others are man-made sources such as pollution from road transport or construction activities. The daily limit for PM₁₀ is 50 µg/m³ and the limit is deemed breached if more than 35 exceedances occur during the year.

PM₁₀ monitoring at the numerous sites within Cork City has been reported upon in EPA's Annual Air Quality Reports and Bulletins (2024, published in November 2025). The limit was breached once on Glanmire Road. There were no exceedances at UCC, Bishopstown MTU, Heatherston Park, South Link Road and Cork Airport.

Existing Problems

Significant progress is being made in the reductions of greenhouse gas emissions; however, Ireland is not on track to meet the 51% emissions reduction target (by 2030 compared to 2018) based on the projections contained in the latest (2025) assessment.

The Climate Change Advisory Council's *Annual Review 2025* outlines Ireland's commitment to achieving climate resilience by 2050, emphasizing the need for effective adaptation measures and coordinated government action, however, it points out that significant gaps remain in preparedness for extreme weather events, particularly in critical infrastructure such as electricity, water, and communication networks. The National Climate Change Risk Assessment and revised National Planning Framework are positive developments, but implementation of adaptation measures is urgently needed.

The Review details that four sectors (Transport, Flood Risk Management, Built and Archaeological Heritage, and Local Government) demonstrated good overall progress, four showed moderate progress (Agriculture, Forestry and Seafood, National Adaptation Framework, Electricity and Gas Networks, and Water Quality and Water Services Infrastructure), two showed limited progress (Communications Networks and Health), and one sector (Biodiversity) showed no progress and supplied insufficient evidence.

The overall results showed a slight decline compared with the results in 2024 review; however, the transport sector was one of the four sectors that demonstrated good overall progress in the 2025. The transport sector has made significant progress in climate adaptation, particularly in enhancing infrastructure resilience and exploring innovative solutions. However, the review emphasizes the need for sustained investment, improved planning, and stronger cross-border collaboration to address vulnerabilities and ensure long-term resilience in the face of increasing climate risks.

Air quality and noise can 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, NO₂ is particularly impactful from a health perspective. The Proposed Variation will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

3.8 Material Assets

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

Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the Proposed Variation, if unmitigated, include: resources such as public open spaces, parks and recreational areas; public buildings

¹¹ For more detail on current daily air quality data refer to: <https://gis.epa.ie/EPAMaps/>.
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and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, waste water infrastructure etc.); and natural resources that are covered under other topics such as water and soil.

Land

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

Coastline

Management of the coastline and coastal erosion to the east of Cork City are topics with relevance to various environmental components. The coastline is 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.

The Port of Cork is a port of national significance and a significant driver of economic development in the Cork region. The Port of Cork is considered a 'Tier 1' Port by the Southern Regional Assembly RSES.

Green Infrastructure

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

Woodland

Woodlands throughout the City provide recreational opportunities in addition to their heritage and economic benefits. They are a valuable resource in terms of biodiversity, recreation and tourism, and also important as links in the green infrastructure network.

Transport

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

The Port of Cork, located to the east of Cork City is a port of national significance and a significant driver of economic development in the Cork region. Cork International Airport is located in the south of Cork City and is the second largest airport in Ireland.

The City is well served by public transport and road links. The M8 motorway a network of national routes (N8/N20/N22/N27/N40) traverse the City. Irish Rail operate services via the Dublin/Cork and Waterford/Clonmel/ Limerick Junction rail lines. There are also a number of public and private bus operators and linkages.

The Cork Metropolitan Area Transport Strategy (CMATS) 2040 has been developed by the National Transport Authority in collaboration with Transport Infrastructure Ireland, Cork City Council and Cork County Council with the aim of supporting an efficient transport network for the Cork Metropolitan Area. The CMATS seeks to actively promote and support improvements to the transport networks which will encourage greater use of sustainable transport, reduce car dependency and support new development in locations where sustainable travel choices can be encouraged and facilitated through existing and upgraded infrastructure and other measures. The Strategy envisages a €3.5 billion investment in transport infrastructure and mobility in Cork and aims to prioritise sustainable transport, reduce car dependency, and to provide a high level of public transport connectivity including a new Light Rail System (LRT) from Ballincollig to Mahon, via the City Centre and Docklands. Planned investments under CMATS include a high frequency bus service (BusConnects), the development of a light rail network, the expansion of commuter rail and investment in local route improvements including new orbital routes. The CMATS incorporates other transport strategy plans such as the Cork Walking Strategy 2013-2018 and the Cork Metropolitan Cycle Network Plan 2017.

Water Services

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

As indicated by Uisce Éireann, there is spare capacity available in all Wastewater Treatment Plant (WWTPs) within Cork City, subject to level of service improvements, apart from Kileens WWTP and Rosemount Kilcully WWTP.¹²

Uisce Éireann is responsible for providing and maintaining adequate public water supply infrastructure throughout Cork City. Public group water schemes are maintained and monitored by Cork City Council.

Cork City and suburbs, Blarney and Tower are all located within the Cork City Water Resource Zone (WRZ)¹³ and as identified by Uisce Éireann, has potential capacity available to meet targeted population growth by 2034¹⁴, subject to a level of service improvement.¹⁵

Waste Management

The National Waste Management Plan for a Circular Economy (Regional Waste Management Planning Offices, 2024) sets out a framework for the prevention and management of waste in Ireland for the period 2024 to 2030. The Development Plan to which the Proposed Variation relates 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.

Existing Problems

The provisions of the Proposed Variation will contribute towards protection of the environment with regard to impacts arising from material assets. The provision of infrastructure and supporting services for development, particularly water and wastewater services, is critical.

3.9 Cultural Heritage

Archaeological Heritage

There are 60 archaeological sites within Cork City Centre including standing stones and medieval walls and c. 400 entries to the Record of Monuments and Places¹⁶ within the surrounding towns, villages and hinterland. Churches, houses, distilleries, factories and graveyards are amongst the most common recorded monuments and sites of significant archaeological, historic and cultural importance include St. Anne's Church, St. Fin Barre's Cathedral, Blarney Castle Estate and Elizabeth Fort.

Clusters of archaeological heritage are concentrated around the City's historic core and within the centres of other settlements in the Variation area. The City's historic core consists of the Medieval City and Georgian City with many sites of significant archaeological interest. Cork City Centre is also designated a Zone of Notification.

Cork's unique industrial heritage include: a range of mill complexes including those in the riverside villages of Douglas and Glanmire; the gunpowder mills in Ballincollig, with its range of surviving buildings and canal system; and examples of industrial -maritime heritage, such as Butter Market in Shandon and the Bonded Warehouses in the Port of Cork. There are two Sites of National Importance in the ownership of Cork City Council, Elizabeth Fort and Ballincollig Gunpowder Mills.

¹² <https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/cork-city> (August 2025)

¹³ A Water Resource Zone (WRZ) is an independent water supply system serving a region, city, town or village and is governed by topography or the extent of the water distribution network in an area. A WRZ may include multiple Water Treatment Plants and/or sources.

¹⁴ Capacity constraints exist and additional analysis of Pre-connection Enquiries and Connection Applications will be undertaken as required by UÉ on an individual basis considering their specific load requirements. Improvement proposals will include but are not limited to leakage reduction and/or capital investment. These proposals will be required to maintain/improve levels of service as demand increases. These proposals will be developed & prioritised through the National Water Resources Plan and investment planning process.

¹⁵ <https://www.water.ie/connections/developer-services/capacity-registers/water-supply-capacity-register/cork-city>

¹⁶ The Record of Monuments and Places is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. It is available from the National Monuments Service and at archaeology.ie.

Architectural Heritage

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.

Examples of Protected Structures in within the area to which the Proposed Variation relates include churches, markets, gaols, post boxes and building fronts. Clusters of architectural heritage can be found in Cork City Centre and in settlements such as Blarney, Ballincollig and Glanmire.

Cork City has an important vernacular heritage with many important historic buildings and structures. Historic Street Character Areas are designated within Cork City and consist of groups of buildings with architectural and social interest, including a number of older residential areas outside the City Centre. Individual buildings of character are also identified, including farmhouses, cottages, stone walls and other local features that contribute to the architectural heritage of the area.

Existing Problems

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

3.10 Landscape

The visual character of Cork City is due to its variety of landscapes and rich and diverse built and cultural heritage. Built around estuarine islands in the valley of the River Lee, Cork City is shaped by its rolling landscape, waterways and a rich mix of natural, built and cultural heritage. The Lee Valley runs through the centre of the City giving rise to steep hills to the north and to the south. The Lee Estuary flows into Cork Harbour to the east of the City.

The existing City Development Plan seeks to protect and enhance the landscape character of the City by protecting the significant landscape elements that contribute to the general amenity of Cork City. Areas of High Landscape Value and Landscape Preservation Zones are identified in the Plan and must be considered when assessing planning applications. Areas of High Landscape Value display an intrinsic landscape character and a special amenity value. Landscape Preservation Zones are areas in need of special protection as their character and amenity value is considered to be to highly sensitive to development.

Other designations included in the existing Plan include:

- **Panoramic viewing locations** are accessible to the public and facilitate views of Strategic Landmark Buildings/Strategic Cityscapes and Strategic Landscapes.
- **Strategic and local landmark buildings** have been identified so that linear views of these buildings can be protected through the management of development. Strategic landmark buildings are those that are widely appreciated due to their visual prominence and the role that they play in helping people to orientate themselves within the City. Local landmark buildings are important within the City's neighbourhoods due to their local visual prominence.
- **Rivers corridors** provide expansive views of the City and rural areas, and include views from quays, bridges and riverbanks.
- **Scenic routes of amenity value** identified within the hinterland area benefit from protection with the aim of ensuring that the natural beauty of these routes is maintained. The objective of the designation is to manage development along these routes in order to ensure that distinctive landscape value and quality is maintained.

Existing Problems

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

3.11 Strategic Environmental Objectives

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

Table 3.1 Strategic Environmental Objectives

Environmental Component	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	<ul style="list-style-type: none"> • Preserve, protect, maintain and where appropriate, restore the terrestrial, aquatic and soil biodiversity, of international, EU and nationally designated sites, protected species and habitats. • Ensure no adverse effects on the integrity of any European site, regarding its qualifying interests, associated conservation status, structure and function. • Maintain and where appropriate, enhance the biodiversity value of local designated and non-designated ecological and heritage areas, which function as stepping stones for migration, dispersal and genetic exchange of wild species. • Enhance biodiversity in line with the National Biodiversity Strategy and its targets. • To protect, maintain and conserve the City's natural capital.
Population and Human Health	<ul style="list-style-type: none"> • Provide high quality residential, community, working and recreational environments with access to sustainable transport options. • Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection. • Ensure that existing population and planned growth is linked with the required infrastructure and the services. • Protect human health and well-being from environment-related pressures.
Soil (and Land)	<ul style="list-style-type: none"> • Protect soils against pollution, and prevent degradation of the soil resource • Promote the sustainable use of infill and brownfield sites over the use of greenfield • Safeguard areas of prime agricultural land and designated geological sites
Water	<ul style="list-style-type: none"> • Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive • Ensure water resources are sustainably managed to deliver proposed regional and City growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments • Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion • Integrate appropriate flood risk management measures and sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals
Material Assets	<ul style="list-style-type: none"> • Make best use of existing infrastructure, promote the sustainable development of new infrastructure and protect existing assets, to meet the needs of the City and its population. • Promote the circular economy, reduce waste, and increase energy efficiencies. • Ensure there is adequate sewerage, water and drainage infrastructure in place to support new development • Reduce the energy demand from the transport sector and support moves to electrification of transport modes and active travel.
Air	<ul style="list-style-type: none"> • To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture. • Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency. • Promote continuing improvement in air quality. • Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution. • Meet Air Quality Directive standards for the protection of human health — Air Quality Directive. • Significantly decrease noise pollution and move closer to WHO recommended levels.
Climatic Factors	<ul style="list-style-type: none"> • Minimise contribution to Climate Change by adopting mitigation and adaptation measures. • Integrate sustainable design solutions into the City's infrastructure (e.g. energy efficient buildings; green infrastructure). • Contribute towards the reduction of greenhouse gas emissions in line with national targets. • Encourage and promote development resilient to the effects of climate change. • Promote the use of renewable energy, energy efficient development and increased use of public transport and active travel.
Cultural Heritage	<ul style="list-style-type: none"> • Protect places, features, buildings and landscapes of cultural, archaeological and / or architectural heritage.
Landscape	<ul style="list-style-type: none"> • To implement the Development Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention.

Section 4 Alternatives

4.1 Introduction

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

4.2 Limitations in Available Alternatives

The alternatives available for the Proposed Variation are significantly limited by the provisions of higher-level planning objectives, including those of Ministerial Guidelines, the Revised National Planning Framework, the Regional Spatial and Economic Strategy for the Southern Region and the existing City Development Plan which set out various requirements for the content of the Variation. Notwithstanding these higher-level policy constraints and the limited scope of the Variation, alternatives to the land use zoning approach are identified and assessed.

4.3 Alternatives Description and Assessment Summary

Two alternatives (with associated components) for the approach to land use zoning were identified and assessed:

Land Use Zoning Approach Alternative 1: “More Compact Development, More Transport Orientated, More Infrastructure-Led”

Under this Alternative, Cork City would be facilitated in meeting the revised population targets, resulting in balanced, orderly development and implementation of the varied Core Strategy.

The approach under this alternative would allow for capacity/delivery with respect to existing and planned infrastructure and services to be integrated into the Plan as varied to the highest degree.

The infrastructure required to be in place to achieve the growth targets is largely already in place or planned under this alternative.

The development of the City would be more compact and sustainable under this scenario and would better support its longer-term viability. A higher number of residential units, in comparison with Alternative 2, would be expected to take place within the existing built-up footprint on brownfield, infill and under-utilised sites at appropriate densities, with a greater focus on use of consolidation and regeneration sites, with potential for wider regeneration benefits to central areas, including housing provision. Regeneration, reuse and redevelopment of more central and brownfield and infill lands and optimising the use of vacant, derelict, and underutilised sites and buildings would be more likely to be achieved. Giving a strong preference to lands that have both greater capacity to satisfy the principles of active travel and a more realistic opportunity of being developed over the lifetime of the Plan, would provide for the proper planning and sustainable development of the City as envisaged by the wider planning framework to a greater degree.

There would be greater potential for transport orientated development, including proximate development patterns linked by active travel infrastructure and public transport. Associated benefits and improvements to the public realm and appearance of the built environment, including liveability and quality of life improvements, would be more likely.

This Alternative would make the greatest contribution towards the protection and management of the environment by facilitating development of lands (including those within the existing built-up footprint of the City and suburbs) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the City and beyond. This Alternative would be considered the most effective out of both alternatives considered in the delivery of a sustainable, low carbon and climate resilient future for the City.

The approach under Alternative 1 would benefit the protection of various environmental components. Although potentially adverse effects associated with land use development would exist, they would be mitigated to a significant degree. Less residual environmental effects would result.

Under this alternative there would be:

- More optimum use of land and resources, with positive role for addressing climate change, such as potential for reduced carbon heavy travel patterns.
- Greater potential for modal shift to sustainable travel such as walking, cycling and public transport, with resultant benefits for climate resilience.
- Use of already serviced lands within the existing built-up footprint of the City and suburbs could lead to potential reduced costs for delivery of new supporting infrastructure.
- Creation of more liveable built environments, with greater accessibility to services and amenities for local communities.

Land Use Zoning Approach Alternative 2: "Less Compact Development, Less Transport Orientated, Less Infrastructure-Led"

Under this Alternative, Cork City would be facilitated in meeting the revised population targets, resulting in balanced, orderly development and implementation of the varied Core Strategy.

The approach under this alternative would not allow for capacity/delivery with respect to existing and planned infrastructure and services considerations to be integrated into the Plan as varied to the highest degree.

Additional significant infrastructure would be required to accommodate sporadic/outer fringe development, more than would be required for Alternative 1 'More Compact Development, More Transport Orientated, More Infrastructure-Led'.

The development of the City would be less compact and less sustainable under this scenario and would not optimally support its longer-term viability. A lower number of residential units, in comparison with Alternative 1, would be expected to take place within the existing built-up footprint on brownfield, infill and under-utilised sites at appropriate densities. Under this alternative there would be potential for greater proportion of housing to be delivered outside of the built-up areas, including on urban fringe and outer areas, creating unsustainable travel patterns with a greater reliance on the private car. Giving less of a preference to lands that have both greater capacity to satisfy the principles of active travel and a more realistic opportunity of being developed over the lifetime of the Plan, would provide for the proper planning and sustainable development of the City as envisaged by the wider planning framework to a lesser degree.

There would be greater potential for negative impacts on the vitality and viability of built-up areas, due to under use of infill sites. This alternative would be likely to result in increased outer fringe development, that would be more difficult to serve with active travel infrastructure and public transport.

This Alternative would make less of a contribution towards the protection and management of the environment by facilitating development of lands (including those within the existing built-up footprint of the City and suburbs) that have relatively low levels of environmental sensitivities and

are served (or can be more easily served) by infrastructure and services. Development of more sensitive, less well-served lands in the City would be provided for. This Alternative would be considered the least effective out of both Alternatives considered in the delivery of a sustainable, low carbon and climate resilient future for the City.

The approach under Alternative 2 would benefit the protection of various environmental components to a lesser degree. Although potentially adverse effects associated with land use development would exist, they would be mitigated to in many cases; however, more residual environmental effects would result.

Under this alternative there would be:

- An increase in car dependency and associated carbon heavy travel patterns, which would undermine efforts aimed at securing climate resilience.
- Increased peripheral pattern of residential development with potential for self-contained and disconnected built environments.
- Reduced potential for modal shift to sustainable travel options such as walking, cycling and public transport.
- Potential for increased costs associated with the delivery on new supporting infrastructure (roads, footpaths etc.) in more peripheral areas.
- Increased costs for the delivery of necessary supporting infrastructure for a higher level of urban fringe and outer areas.

The selected land use zoning approach for the Variation is Alternative 1. This compact development approach performed more favourably across multiple Strategic Environmental Objectives, including those relating to climate, human health, material assets and landscape. This approach would facilitate Cork City in meeting the revised population targets and would enable the rapid activation of available and housing delivery in the interests of providing housing for people.

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

The selected alternative for the Variation that emerged from the planning/SEA process is indicated above.

This alternative has been integrated into the Proposed Variation that is being placed on public display having regard to both:

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

Section 5 Summary of Effects arising from the Proposed Variation

Table 5.1 summarises the overall environmental effects arising from Proposed Variation provisions. The effects encompass all in-combination/cumulative effects arising from implementation of the Proposed Variation and associated documents. The Proposed Variation would contribute towards the proper planning and sustainable development of Cork City and the effects are consistent with those identified by the SEA for the Cork City Development Plan 2022-2028.

The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Proposed Variation are detailed as are residual effects, taking into account mitigation integrated into both the Proposed Variation and the Cork City Development Plan. Taking account of embedded mitigation within the existing Plan, mitigation within the Proposed Variation and the statutory environmental assessment requirements applying at project level, no significant adverse residual environmental effects are predicted.

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

Appropriate Assessment (AA) Screening is being undertaken alongside the Proposed Variation. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The Screening for AA for the Proposed Variation has concluded that the any likelihood for significant effect to any European site as a result of the Proposed Variation can be ruled out. The preparation of the Proposed Variation, SEA and Screening for AA has taken place concurrently and the findings of the Screening for AA have informed the SEA.

A Strategic Flood Risk Assessment (SFRA) has been undertaken as part of the preparation of the Proposed Variation. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. The SFRA has informed both the land use zoning and the written provisions of the Proposed Variation.

Table 5.1 Overall Findings –Effects arising from the Proposed Variation

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Southern RSES, the Cork City Development Plan and adjacent Development Plans and lower-tier land use plans.			
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the city centre and the City's suburbs) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere in the City and beyond. Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats. Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna. Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain. 	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds and bats. 	<ul style="list-style-type: none"> Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation). 	BFF
Population and Human Health	<ul style="list-style-type: none"> Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the city centre and the City's suburbs) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the City and beyond. Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the city centre and the City's suburbs) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere in the City and beyond. Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, such as air and water. 	<ul style="list-style-type: none"> Potential adverse effects arising from flood events. Potential interactions with human health if effects arise from environmental vectors. 	<ul style="list-style-type: none"> Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below. 	PHH

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Southern RSES, the Cork City Development Plan and adjacent Development Plans and lower-tier land use plans.			
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
Soil	<ul style="list-style-type: none"> Contribution towards the protection of soils (including those use for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the city centre and the City's suburbs) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere in the City and beyond. Contribution towards the protection of the environment from contamination by requiring the highest standards of remediation and, where appropriate, consultations with the EPA and other relevant bodies in order to resolve any instances of environmental pollution created by contaminated land. 	<ul style="list-style-type: none"> Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank and coastal erosion. 	<ul style="list-style-type: none"> Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. Riverbank and coastal erosion will continue to occur naturally over time and is likely to be enhanced by climate change. 	S
Water	<ul style="list-style-type: none"> Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the city centre and the City's suburbs) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere in the City and beyond. Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations. Contribution towards flood risk management and appropriate drainage. 	<ul style="list-style-type: none"> Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	<ul style="list-style-type: none"> Any increased loadings as a result of development to comply with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Proposed Variation. 	W
Material Assets	<ul style="list-style-type: none"> Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the city centre and the City's suburbs) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the City and beyond. Contribution towards compliance with national and regional water services and waste management policies. Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. Contribution towards reductions in average energy consumption per capita including promoting sustainable compact growth, sustainable mobility, sustainable design and energy efficiency. 	<ul style="list-style-type: none"> Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. 	<ul style="list-style-type: none"> Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan. Residual wastes to be disposed of in line with higher-level waste management policies. Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework. 	MA

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Southern RSES, the Cork City Development Plan and adjacent Development Plans and lower-tier land use plans.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
Air and Climatic Factors	<ul style="list-style-type: none"> • Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the city centre and the City's suburbs) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the City and beyond. • In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to: <ul style="list-style-type: none"> ○ Sustainable compact growth; ○ Sustainable mobility, including walking, cycling and public transport; ○ Drainage, flood risk management and resilience; ○ Sectors including energy and buildings; and ○ Sustainable design, energy efficiency and green infrastructure. 	<ul style="list-style-type: none"> • Potential conflict between development under the Plan as varied and aiming to reduce carbon emissions in line with local, national and European environmental objectives. • Potential conflicts between transport emissions, including those from cars, and air quality. • Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. • Potential conflicts with climate adaptation measures including those relating to flood risk management. 	<ul style="list-style-type: none"> • An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions that have been integrated into the Proposed Variation, including those relating to sustainable compact growth and sustainable mobility. • Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Proposed Variation to ensure that noise levels at sensitive receptors will be minimised. 	AC
Cultural Heritage	<ul style="list-style-type: none"> • Contributes towards protection of cultural heritage elsewhere by facilitating compact development. • Contributes towards protection of cultural heritage by facilitating brownfield development and regeneration. 	<ul style="list-style-type: none"> • Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<ul style="list-style-type: none"> • Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation. 	CH
Landscape	<ul style="list-style-type: none"> • Contributes towards protection of wider landscape and landscape designations by facilitating compact development. 	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<ul style="list-style-type: none"> • Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Development Plan's landscape protection measures. 	L

Section 6 Mitigation and Monitoring Measures

6.1 Mitigation

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

Mitigation was achieved through:

- Strategic work undertaken by the Council to ensure evidence-based planning;
- Considering alternatives for the Proposed Variation;
- The integration of individual provisions into the text of the existing, already in force, City Development Plan; and
- The integration of environmental considerations into the zoning provisions and text of the Proposed Variation¹⁷.

6.2 Monitoring

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. Monitoring is based around indicators that allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified at Table 3.1 and used in the evaluation. Monitoring indicators, targets, sources and remedial action is provided at Table 6.1 overleaf.

¹⁷ The land use zoning and objectives provided for by the Variation have taken into account environmental considerations, including those relating to ecology, cultural heritage, landscape/topography, infrastructural requirements and water. Zoning has been applied in a way that considers sustainable and compact growth, taking into account the various requirements set out in the higher-level Revised National Planning Framework, Southern RSES and existing Cork City Development Plan. Flood risk management and drainage provisions are already in force through the City Development Plan. In addition, land use zoning contained within the Variation has been informed by an iterative SFRA process, including both: the delineation of flood risk zones; and future climate scenario risk areas (mid-range as well as high end). The detailed Variation preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that helps to avoid inappropriate development being permitted in areas of elevated flood risk.

Land Use Zoning takes account of the tiered approach required by the National Planning Framework and will contribute towards a co-ordination of zonings with existing and planned infrastructure and services.

In addition to the individual provisions integrated into the text of the existing City Development Plan, provisions have also been integrated into the text of the Proposed Variation through the Proposed Variation-preparation and SEA, SFRA and AA processes.

Table 6.1 Indicators, Targets, Sources and Remedial Action

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action ¹⁸
Biodiversity, Flora and Fauna	BFF	<ul style="list-style-type: none"> Condition of European sites 	<ul style="list-style-type: none"> Require all local level land use plans, e.g. framework plans, to include ecosystem services and green/blue infrastructure provisions and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, the City's Heritage and Biodiversity Plan Confirmation of compliance with Plan provisions relating to the protection of European Sites and sustaining resources 	<ul style="list-style-type: none"> DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years) DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 6 years) Internal review of local land use plans, e.g. framework plans. Internal review of development management / grants of permission 	<ul style="list-style-type: none"> Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.
		<ul style="list-style-type: none"> Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted 	<ul style="list-style-type: none"> Require all local level land use plans, e.g. framework plans, to include ecosystem services and green/blue infrastructure provisions and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, the City's Heritage and Biodiversity Plan 	<ul style="list-style-type: none"> Internal review of local land use plans, e.g. framework plans. 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. under the Development Plan 	<ul style="list-style-type: none"> Screen for and/or undertake SEA and AA as relevant for new Council policies, plans, programmes etc. under the Development Plan 	<ul style="list-style-type: none"> Internal review of preparation of new Council policies, plans, programmes etc. under the Development Plan 	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> Status of water bodies 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below
		<ul style="list-style-type: none"> Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 6 "Green and Blue Infrastructure Open Space and Biodiversity" 	<ul style="list-style-type: none"> For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 6 "Green and Blue Infrastructure Open Space and Biodiversity" 	<ul style="list-style-type: none"> Internal review of development management / of grants of permission¹⁹ 	<ul style="list-style-type: none"> Review internal systems
Population and Human Health	PHH	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 7 "Economy and Employment" 	<ul style="list-style-type: none"> Progress in successfully implementing Plan measures relating to the promotion of economic growth as provided for by Chapter 7 "Economy and Employment" 	<ul style="list-style-type: none"> Internal review of progress on implementing Plan objectives 	<ul style="list-style-type: none"> Review internal systems Consultations with DCEE
		<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan 	<ul style="list-style-type: none"> Review of published information from the Health Service Executive and EPA Internal consultations with the 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA

¹⁸ Where remedial action is required, consultations with government agencies (e.g. DCEE, DT, EPA, HSE, NPWS, Regional Assembly, Uisce Éireann) may be undertaken in order to confirm causes of any identified changes in the environment and in order to develop appropriate responses.

¹⁹ Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action ¹⁸
				Council's Environment Department	
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures Progress in successfully implementing Plan measures relating to active travel 	<ul style="list-style-type: none"> CSO data Internal review of progress on implementing Plan objectives 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DCEE and NTA to develop a tailored response.
		<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans, e.g. framework plans, to include specific green infrastructure mapping 	<ul style="list-style-type: none"> Internal review of local land use plans, e.g. framework plans. 	<ul style="list-style-type: none"> Review internal systems
Soil (and Land)	S	<ul style="list-style-type: none"> Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> Contribute towards NPF target of maintaining built surface cover nationally to below the EU average of 4% In accordance with National Policy Objectives of the National Planning Framework, a minimum of 50% of the housing growth targeted in the City is to be delivered within the existing built-up footprint To map brownfield and infill land parcels across the City 	<ul style="list-style-type: none"> EPA Geoportal Compilation of greenfield and brownfield development for the DHLGH Internal review of development management / grants of permission 	<ul style="list-style-type: none"> Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.
		<ul style="list-style-type: none"> Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	<ul style="list-style-type: none"> Internal review of development management / grants of permission where contaminated material must be disposed of 	<ul style="list-style-type: none"> Consultations with the EPA and Development Management
		<ul style="list-style-type: none"> Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Internal review of development management / grants of permission 	<ul style="list-style-type: none"> Review internal systems
Water	W	<ul style="list-style-type: none"> Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> Subject to exemptions provided for by Article 4 of the Water Framework Directive, 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 	<ul style="list-style-type: none"> EPA Monitoring Programme for WFD compliance²⁰ 	<ul style="list-style-type: none"> Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Uisce Éireann to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Uisce Éireann to achieve the necessary capacity.
		<ul style="list-style-type: none"> Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk 	<ul style="list-style-type: none"> Internal review of development management / grants of permission 	<ul style="list-style-type: none"> Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate

²⁰ Including monitoring of water quality and nitrogen deposition due to bioenergy and agricultural projects where available.

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Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action ¹⁸
Material Assets	MA	<ul style="list-style-type: none"> Programmed delivery of Uisce Éireann infrastructure for all key growth towns in line with Uisce Éireann Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan 	<ul style="list-style-type: none"> All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where individual on-site wastewater treatment systems are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the individual on-site wastewater treatment system will not – in combination with other septic tanks – contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Uisce Éireann in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil 	Internal review of development management / grants of permission	<ul style="list-style-type: none"> flood risk mitigation and management measures. Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Uisce Éireann to achieve the necessary capacity.
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures Progress in successfully implementing Plan measures relating to active travel 	<ul style="list-style-type: none"> CSO data Internal review of progress on implementing Plan objectives 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DCEE and NTA to develop a tailored response.
Air	A	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to previous levels NO₂ (Nitrogen Dioxide), PM10 (particulate matter with diameter of 10 microns or less) and O₃ (Ozone) as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by car compared to previous levels Improvement in Air Quality trends, particularly in relation to transport related emissions Progress in successfully implementing Plan measures relating to sustainable mobility and travel 	<ul style="list-style-type: none"> CSO data EPA Air Quality Monitoring Internal review of progress on implementing Plan objectives 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above previous CSO figures, Council will coordinate with the Regional Assembly, DHLGH, DCEE and NTA to develop a tailored response. See also entry under Population and human health above.
Climatic Factors	C	<ul style="list-style-type: none"> Implementation of Plan measures relating to climate reduction targets 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets 	Internal review of development management / grants of permission	<ul style="list-style-type: none"> Review internal systems
		<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 	<ul style="list-style-type: none"> Confirmation of progress in implementing of Cork City Council's Climate Change Adaptation Strategy 2019-2024 and Climate Action Plan 2024-2029 EPA Greenhouse Gas Emissions reporting Internal review of implementation of Plan provisions relating to renewable energy in 	<ul style="list-style-type: none"> Where targets are not achieved, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.
		<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> Contribute towards the National Energy and Climate Plan 2021-2030 sectoral target for transport (RES-T) of 14%, by 2030 (this may be increased following a provisional European agreement on 30 March 2023 for a binding overall RES target of at least 42.5% by 2030) 		

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action ¹⁸
		<ul style="list-style-type: none"> Greenhouse gas emissions 	<ul style="list-style-type: none"> Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 51% (compared to 1990 levels) by 2030 (helping to set Ireland on a path to reach net-zero emissions by 2050) 	transport, including facilitating the development of electricity charging and transmission infrastructure	<ul style="list-style-type: none"> Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.
		<ul style="list-style-type: none"> Energy consumption, the uptake of renewable options and solid fuels for residential heating 	<ul style="list-style-type: none"> To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 		
		<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to previous levels 	<ul style="list-style-type: none"> Decrease in the proportion of journeys made by residents of the City using private fossil fuel-based car compared to previous levels Progress in successfully implementing Plan measures relating to sustainable mobility and travel 	<ul style="list-style-type: none"> CSO data Internal review of progress on implementing Plan objectives 	
		<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures Progress in successfully implementing Plan measures relating to active travel 	<ul style="list-style-type: none"> CSO data Internal review of progress on implementing Plan objectives 	
Cultural Heritage	CH	<ul style="list-style-type: none"> Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Internal review of development management / grants of permission 	<ul style="list-style-type: none"> Where monitoring reveals visitor or development pressure is causing negative effects on designated archaeological or architectural heritage, the Council will work with the Regional Assembly, Fáilte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation.
		<ul style="list-style-type: none"> Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> Internal review of development management / grants of permission 	
Landscape	L	<ul style="list-style-type: none"> Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape designations, resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Internal review of development management / grants of permission 	<ul style="list-style-type: none"> Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re-examine Plan provisions and the effectiveness of their implementation.