Draft Variation No. 1 of Fingal Development Plan 2023-2029

Strategic Environmental Assessment (SEA) Environmental Report

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Contents

1 Introduction

1.1 Overview

This is the Environmental Report of the Strategic Environmental Assessment (SEA) for the *Draft Variation No. 1 of Fingal Development Plan 2023-2029* (hereafter referred to as "Variation No. 1").

The Fingal Development Plan 2023-2029[1] was made on 22 February 2023 and came into effect on the 05 April 2023 (hereafter the FDP). The FDP comprises of Written Statement and Appendices.

The Revised National Planning Framework (NPF) sets updated targets for population and housing growth, with National Policy Objective 42 targeting the delivery of approximately 50,000 additional homes per annum to 2040. These new targets reflect the results of Census 2022 and research by the Economic and Social Research Institute (ESRI) and others. Under Section 10 of the Planning and Development Act 2000, the Core Strategy of the Fingal Development Plan must be consistent with the national and regional development objectives of the NPF. The Variation No.1 to the Fingal Development Plan 2023-2029 proposes to update the Fingal Development Plan 2023-2029 (FDP) in order to ensure consistency with the Revised NPF and NPF Implementation: Housing Growth Requirements Guidelines.

In accordance with Section 13 of the Planning and Development Act 2000, as amended, Fingal County Council is proposing Variation No.1 of the Fingal Development Plan 2023-2029.

The following report has been prepared to comply with the provisions of Article 12 of S.I. 436 of 2004 – European Communities (Strategic Environmental Assessment) Regulations – as amended by S.I. 201 of 2011 – European Communities (Strategic Environmental Assessment) (Amendment) Regulations 2011.

The Report has had due regard to the SEA Regulation[2], in particular: -

- methods of assessment;
- contents and level of detail in the Variation;
- the stage in the Plan or Programme-making process;
- the extent to which certain matters are more appropriately assessed at different levels in the decision-making process in order to avoid duplication of environmental assessment; and
- consultation with the SEA Environmental Authorities.

Brady Shipman Martin (BSM) has been appointed by Fingal County Council to carry out the screening Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) and if required the full SEA and AA in respect of the proposed Variation No.1 of the Fingal Development Plan 2023-2029.

The Draft Variation No. 1 has been screened for Appropriate Assessment (AA) in accordance with Article 6(3) of the Habitats Directive (92/43/EEC of 21 May 1992[3]) and Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, and it has been concluded that potential for effects on the integrity of European sites cannot be excluded beyond all reasonable scientific doubt and a Natura Impact Report (NIR) is being prepared. Therefore, in accordance with Circular Letter SEA 1/08 & NPWS 1/08[4] the Draft Variation No.1 is also required to undergo a Strategic Environmental Assessment (SEA) in accordance with

[1] https://www.fingal.ie/development-plan-2023-2029
[2] https://www.irishstatutebook.ie/eli/2004/si/436/made/en/print
[3] https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en
[4] Circular Letter SEA 1/08 & NPWS 1/08

Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment[5] (known as the SEA Directive).

This Environmental Report provides the findings of the SEA and takes account of recommendations contained in submissions from the Environmental Authorities. On finalisation of the Plan, an SEA Statement will be prepared, summarising, *inter alia,* how environmental considerations have been integrated into the Plan.

1.2 Variation No.2 of Fingal Development Plan 2023-2029

Fingal County Council is also proposing Variation No. 2 of the Fingal Development Plan 2023-2029, which is running concurrent with proposed Variation No.1. Proposed Variation No.2 and is subject to separate screening for SEA and AA.

[5] DIRECTIVE 2001/42/EC: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN

2 Strategic Environmental Assessment

2.1 Introduction

SEA is a process for evaluating, at the earliest appropriate stage, the environmental quality and consequences of Plans or Programmes (P / Ps). The purpose is to ensure that the environmental consequences of P / Ps are assessed both during their preparation and prior to their adoption. The SEA process also gives specified environmental authorities, interested parties and the general public, an opportunity to comment on the environmental impacts of the proposed P / P and to be kept informed during the decision-making process.

Directive 2001/42/EC[6] of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment (the 'SEA Directive') requires EU Member States to assess the 'likely significant environmental effects' of plans and programmes prior to their adoption. This provides for the assessment of strategic environmental considerations at an early stage in the decision-making process.

Article 1 of the SEA Directive states that:

> *"The objective of this directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment."*

The SEA Directive was transposed into Irish law through:

- *Statutory Instrument (S.I.) No. 435 of 2004 (the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004), as amended by S.I. No. 200 of 2011 (the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011); and*
- *S.I. No. 436 of 2004 (the Planning and Development (Strategic Environmental Assessment) Regulations 2004), as amended by S.I. No. 201 of 2011 (the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011).*

S.I. No. 435 of 2004, as amended by S.I. No. 200 of 2011, relates to SEA as it applies to plans or programmes prepared for *"agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism and town and country planning or land use, and which set the framework for future development consent of projects listed in Annexes I and II to the Environmental Impact Assessment Directive."*[7].

S.I. No. 436 of 2004, as amended by S.I. No. 201 of 2011, relates to SEA as it applies to plans or programmes where the context requires, *"a development plan, a variation of a development plan, a local area plan (or an amendment thereto), regional planning guidelines or a planning scheme"*[8].

Therefore, the SEA for Variation No.1 is being prepared under the requirements of S.I. No. 436 of 2004, as amended by S.I. No. 201 of 2011.

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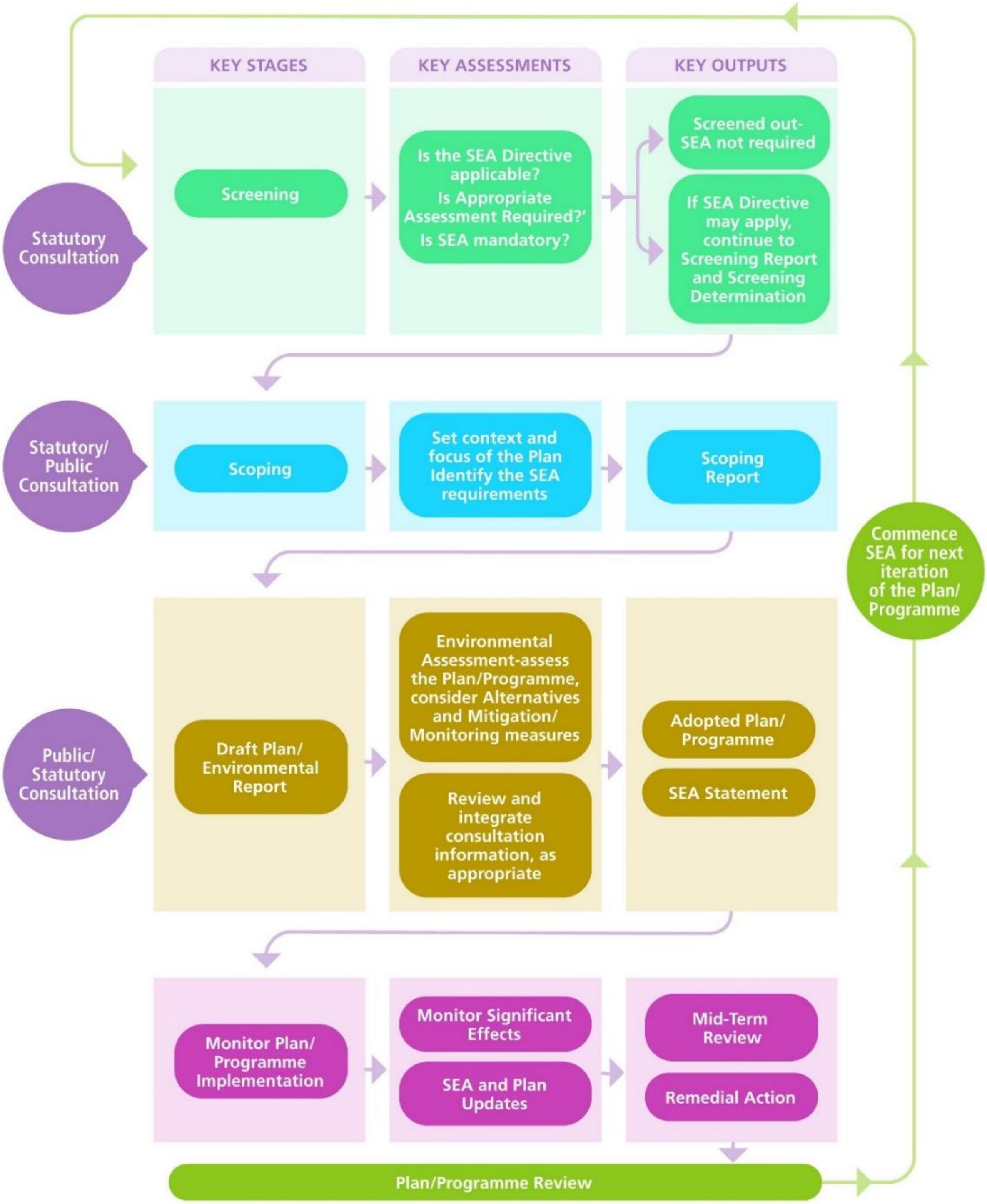
[6] SEA Directive: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN
[7] See Section 9(1)(a)
[8] Section 5(c)

2.2 SEA Stages and Process

The key focus of SEA is to take environmental issues, and in particular '*likely significant environmental effects'* of a P / P, into consideration during the plan or programme making process. The key stages in the SEA process as they relate to Variation No.1 are outlined in **Figure 2.1** and **Table 2.1** below.

Figure 2.1 Overview of SEA Process (EPA SEA Process Flow, 2021[9])



[9] EPA: http://www.epa.ie/pubs/advice/ea/SEA%20Process%20Checklist.pdf

Table 2.1 Outline of the SEA Process

Stage	Description	Status
1. Screening	The requirement to undertake a SEA is mandatory for certain Plan / Programme (P / P). Where SEA is not a mandatory requirement, the P / Ps is subject to a 'Screening process', to consider if it is *likely to have significant effects* on the environment, and therefore, if SEA is required. Screening of the P / P is carried out in accordance with Article 13K of the Planning and Development Regulations (PDR) 2001 as amended. It is noted that in accordance with Circular Letter SEA 1/08 & NPWS 1/08[10], SEA for a P / P is also a mandatory requirement where the P / P requires Appropriate Assessment (AA) under Article 6(3) of the Habitats Directive (92/43/EEC[11]).	Completed ✓
2. Scoping	Preparation of a SEA Scoping Report highlighting that the Environmental Report is required to include: ▪ methods of assessment; ▪ contents and level of detail of the proposed variation; ▪ the stage of the proposed variation in the decision-making process; and ▪ the extent to which certain matters are more appropriately assessed at different levels in the decision-making process in order to avoid duplication of environmental assessment. Scoping provides for consultation with the Environmental Authorities specified in Article 13M of S.I. No. 436 of 2004, as amended by Regulations S.I. No. 201 of 2011, and the process allows for incorporation of the views of the environmental authorities within the P / P and the SEA Environmental Report.	Completed ✓
3. Environmental Report	Preparation of a systemic identification and evaluation of alternatives and assessment of the *likely significant environmental effects* of implementing the P / P. The findings of the assessment, which is carried out at various stages in the P / P making (*e.g.* Draft, Amended Draft *etc.*), are provided in the SEA Environmental Report in accordance with Article 13N of S.I. No. 436 of 2004, as amended by Regulations S.I. No. 201 of 2011. The output from this stage is an Environmental Report which accompanies the draft P / P required on public display.	Current Stage
4. SEA Statement	Completion / adoption of the Final Variation, taking account of *likely significant environmental effects*, any submissions or observations received from consultations and integration of mitigation and monitoring measures within the Plan. The Environmental Report is concluded and an SEA Statement is prepared in accordance with Article 13Q of S.I. No. 436 of 2004, as amended by Regulations S.I. No. 201 of 2011, summarising: ▪ how environmental considerations have been integrated into the Plan / Programme; ▪ how the environmental report, and any submissions or consultations have been taken into account in the preparation of the Plan / Programme; ▪ the reasons for choosing the Plan / Programme; and ▪ the measures decided for monitoring he significant environmental effects of implementation of the Plan / Programme.	Final Stage

[10] NPWS: https://www.npws.ie/sites/default/files/general/circular-sea-01-08.pdf
[11] DIRECTIVE 92/43/EEC: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN

2.3 Screening for the Requirement for SEA

The requirement to undertake a SEA is mandatory for certain P / Ps that are above specified thresholds. Where P / Ps are below specified thresholds, SEA is not a mandatory requirement, and the P / P is subject to a 'Screening process', to consider if it is likely to have significant effects on the environment, and therefore, if SEA is required.

Screening for the purposes of SEA is defined as "*the determination of whether implementation of a P / P [Plan or Programme] would be likely to have significant environmental effects on the environment. The process of deciding whether a P / P [Plan or Programme] requires SEA.*"[12] The criteria for screening, i.e. determining whether a particular plan is likely to have significant environmental effects are set out in Annex II of the SEA Directive. These criteria are reproduced in Schedule 2A of S.I. No. 436 of 2004, as amended by S.I. No. 201 of 2011. The criteria are set out under two principal headings, each of which have a number of sub-criteria:

- Characteristics of a Plan / Programme; and
- Characteristics of the effects and of the area likely to be affected.

Article 13K – '*Determination of need for environmental assessment of variation of development plan*' of S.I. No. 436 of 2004, as amended requires that:

> *(1) Where a planning authority proposes to make a variation of a development plan under section 13 of the Act, it shall, before giving notice under section 13(2) of the Act, consider whether or not the proposed variation would be likely to have significant effects on the environment, taking into account of relevant criteria set out in Schedule 2A.*
>
> *(2) Where the planning authority, following consideration under sub-article (1), determines that the proposed variation would be likely to have significant effects on the environment [..]*

Notwithstanding the above, it is also noted that in accordance with Circular Letter SEA 1/08 & NPWS 1/0813, SEA for a P / P is also a mandatory requirement where the P / P requires Appropriate Assessment (AA) under Article 6(3) of the Habitats Directive (92/43/EEC).

Despite its positive intent, Variation No.1 comprising the rezoning of rural, green belt and open space lands for residential use and the change in long-term strategic reserve lands at Dunsink has the potential to generate likely significant environmental impacts in the absence of mitigation. In addition, Draft Variation No.1 has been screened for Appropriate Assessment (AA) in accordance with Article 6(3) of the Habitats Directive (92/43/EEC of 21 May 199214) and Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended, and it has been concluded that potential for effects on the integrity of European sites cannot be excluded beyond all reasonable scientific doubt and a Natura Impact Report (NIR) is being prepared. Therefore, in accordance with Circular Letter SEA 1/08 & NPWS 1/08 the Variation No.1 is also required to undergo Strategic Environmental Assessment (SEA) in accordance with Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment[15] (known as the SEA Directive).

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[12] EPA: http://www.epa.ie/pubs/advice/ea/SEA%20Pack%202018.pdf
[13] https://www.npws.ie/sites/default/files/general/circular-sea-01-08.pdf
[14] https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en
[15] DIRECTIVE 2001/42/EC: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN

Therefore, Variation No.1 is subject to SEA, and an SEA Environmental Report (this report) has been prepared to accompany Draft Variation No.1, and the AA Screening and Natura Impact Report (NIR) on public display.

2.4 SEA Scoping

SEA Scoping (Stage 2) has been undertaken for consideration of the range and level of detail of the information to be included in the SEA Environmental Report as set out in Article 13(M) of S.I. No. 436 of 2004, as amended. This ensures that the SEA is focused on the relevant environmental issues and examines issues at the appropriate level of detail.

An SEA Scoping Report was issued to the Environmental Authorities specified in Article 13A(4) of S.I. No. 436 of 2004, as amended, - refer to **Table 2.2**.

Table 2.2 List of Consultees for the Scoping Stage

Prescribed Environmental Authorities*	
Environmental Protection Agency (EPA) sea@epa.ie	Dublin City County Council
Department of Housing, Local Government and Heritage sea@housing.gov.ie	South Dublin County Council
Minister for Housing, Local Government and Heritage, Development Applications Unit manager.DAU@npws.gov.ie	Meath County Council
Minister for Climate, Energy and the Environment PlanningNotifications@dcee.gov.ie	Kildare County Council
Department of Agriculture, Food and the Marine Environmental_Co-ordination@agriculture.gov.ie	-

**For consultation under Article 13A(4) of Planning and Development Regulations 2001, as amended*

Submissions / observations on the scoping of the Environmental Report were received from the environmental authorities and comments have been incorporated into the Plan and Environmental Report as set out in **Table 2.3**.

Table 2.3 SEA Scoping Submissions / Observation from Environmental Authorities

Environmental Authority	Outline of Nature of the Submission	Response to consideration of nature of submission
Environmental Protection Agency (EPA)	The submission from EPA includes the following comments and recommendations: EPA highlights several key environmental issues to consider in preparing the Variation and SEA. The submission also attached the following resource document - '*SEA of Local Authority Land-Use Plans – EPA Recommendations and Resources'* and advises to take account of it while preparing the Variation and SEA.	The submission provides details on legislation, guidance and sources of environmental data/information which have been used in the preparation of the SEA Environmental Report for Variation No.1.
	The submission advises that the Variation should align with key relevant higher-level plans and programmes and should be consistent with the relevant objectives and policy commitments of the National Planning Framework and the Regional Spatial and Economic Strategy for the Eastern and Midlands Region.	
	The submission highlights the guidance and resources available on EPA's website including: - SEA process guidance and checklists; - Inventory of spatial datasets relevant to SEA; - Topic and sector specific SEA guidance (including SEA and Integration Guidance (EPA, 2025), Good practice note on Cumulative Effects Assessment (EPA, 2020), Developing and Assessing Alternatives in SEA (EPA, 2015), and Integrated Biodiversity Impact Assessment (EPA, 2012)). -Can access these guidance notes and other resources at: https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/sea-topic-and-sector-specific-guidance-/ - Catchments.ie website provides a single point of access to water quality and catchment data from the National WFD monitoring programme. - EPA AA GeoTool has been developed in partnership with the NPWS. It allows users to a select a location, specify a search area and gather available information for each European Site within the area.	
	The submission highlights that EPA's SEA GIS Search and Reporting Webtool has been updated recently and allows an indicative report on key aspects of the environment in a specific	

Environmental Authority	Outline of Nature of the Submission	Response to consideration of nature of submission
	geographic area to be produced. It is intended to assist public authorities in SEA screening and scoping exercises.	
	The submission notes that EPA has published the 'Ireland's State of the Environment Report 2024'. This report should be considered, and relevant aspects integrated as appropriate, in implementing the Plan outputs/ recommendations.	
	The submission advises to ensure that the Variation aligns with national commitments on climate change mitigation and adaptation, as well as relevant sectoral, regional and local adaptation plans.	
	EPA highlights the requirement under the SEA Regulations to consult with Environmental Authorities (EPA, Minister of Housing, Local Government & Heritage, Minister for Environment, Climate & Communications, Minister for Agriculture, Food and the Marine)	
Kildare County Council (KCC)	The submission acknowledges the receipt of the documents.	No further response at this stage
Meath County Council (MCC)	MCC in their submission highlight the cross-boundary planning consideration arising from the shared boundary between Meath and Fingal and includes: - Regional infrastructure and transportation networks; - Water services infrastructure capacity and coordination; - Environmental designations (European sites, watercourses, etc.) that traverse county boundaries;	The Infrastructure Capacity Assessment for the Fingal Development Plan 2023-2029 is contained in Appendix 4 of the Development Plan. This provides an overview of planned water, transportation, active travel, and other infrastructure across the County over the plan period. The Infrastructure Capacity Assessment concluded that no fundamental constraints were identified for the plan period, and that while there may be local infrastructural needs and upgrades needed for certain sites, all lands within the County are serviced and connected to public water systems and existing/planned roads, public transport networks and active travel networks.
	MCC further requests that the following matters be adequately addressed in the Environmental Report: 1. Cross-Boundary Coordination That the SEA Environmental Report considers and assesses potential cross-boundary environmental effects, particularly in relation to shared watercourses (River Delvin,	

Environmental Authority	Outline of Nature of the Submission	Response to consideration of nature of submission
	Broadmeadow River, etc.), ecological corridors, and cumulative impacts on shared environmental receptors. 2. Strategic Infrastructure That consideration be given to the cumulative effects of housing growth across both counties on regional infrastructure capacity, including transportation networks, water services infrastructure (Uisce Éireann assets), and waste management facilities. 3. Climate Change and Flood Risk That the assessment adequately considers cumulative climate change impacts and flood risk management, particularly in relation to watercourses that traverse both counties and coastal/estuarine areas of shared environmental significance. 4. Consistency with Regional Policy That the Variation and associated SEA remain consistent with the objectives of the Eastern and Midland Regional Spatial and Economic Strategy (RSES) 2019-2031 and the Dublin Metropolitan Area Strategic Plan (MASP), which provides the strategic planning framework for both counties.	A review of the Infrastructure Capacity Assessment has been undertaken as part of preparatory work for Variation 1 of the Fingal Development Plan 2023-2029, and amendments to the Infrastructure Capacity Assessment will be included in that Variation. While this review has identified necessary updates arising from the progression of several projects and revisions to the National Planning Framework and National Development Plan, it is considered that the overall conclusions of the Infrastructure Capacity Assessment remain valid.
Department of Housing, Local Government and Heritage (Development Applications Units (DAU))	The submission from DAU highlights that the SEA scoping report presents extensive information regarding the present status of biodiversity in Fingal and includes lists of European sites within the County and in Ireland's adjacent territorial waters, and of Natural Heritage Areas (NHAs), proposed Natural Heritage Areas (pNHAs), Nature Reserves and other nature conservation designations pertaining to areas within Fingal.	The response has been noted.
	The submission further acknowledges the Section 6 of the SEA Scoping Report and Table 6.1 'Strategic Environmental Objectives (SEOs) for FCC CDP Variation No. 1' which includes three SEOs in relation to biodiversity (flora and fauna) which will provide the basis for the assessment of the effects of Variation No. 1 on biodiversity in Fingal. The submission states that the Department supports and endorses the use of these SEOs as a basis against which the potential effects of the proposed Variation No. 1 on flora, fauna and ecologically significant habitats in Fingal and adjacent areas can be evaluated and which	The response has been noted and the information provided has informed the preparation of the Environmental Report.

Environmental Authority	Outline of Nature of the Submission	Response to consideration of nature of submission
	mitigation measures that SEA and parallel Appropriate Assessment (AA) suggest will be required to avoid any adverse effects identified must be targeted to achieve. Further, the Department considers an accurate evaluation of the potential effects of proposed Variation No. 1 on plants, animals and ecologically valuable habitats will be achieved by the SEA process and appropriate mitigation measures to minimise possible adverse effects of Variation No. 1 on biodiversity developed.	
	DAU further state that AA shall be carried out in tandem with the SEA as the designated Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) in or neighbouring Fingal are coastal or marine sites, including several large estuarine sites which have been designated as both SACs and SPAs, to which Fingal's rivers largely drain, it will be necessary that the AA to be undertaken shall identify all potential sources of pollution of these rivers and the downstream estuaries which might result from eventual residential and associated development of lands re-zoned under Variation No. 1, and provide for mitigation measures to be incorporated in such development to prevent pollution from these potential sources. The estuarine sites concerned and the rivers draining to them are the Rogerstown Estuary SAC/SPA and the Ballyboghil Stream, the Malahide Estuary SAC/SPA and the Broadmeadow and Ward Rivers, Turvey Stream and Gaybrook and the Baldoyle Estuary SAC/SPA and the Sluice and Mayne Rivers.	The response has been noted and the information provided has informed the preparation of the Environmental Report.
	The submission states that the AA should also evaluate the possible effects that the Proposed Variation No 1 may have on the ex-situ usage of lands outside the estuarine SPAs referred to and other Fingal coastal SPAs by Special Conservation Interest (SCI)/QI bird species for these European sites. Populations of a number of SCI bird species for Fingal SPAs are known to forage to a considerable extent outside the SPAs with which these populations are associated, often some distance away and inland from the relevant SPAs. SCI species recently involved in such ex-situ foraging in Fingal include curlew, black-tailed godwit, oystercatcher, lapwing, golden plover, black-headed gull, light-bellied brent goose and greylag goose. Amongst the lands so utilised by SCI birds, as well as agricultural lands, some of which may be re-zoned under Variation No. 1, are amenity lands and especially playing fields in parks, and school and club grounds. Increased human populations in the catchments of such amenities, arising from accelerated residential development facilitated by Proposed Variation No. 1, may lead to	The response is noted. In response, the proposed variation relates to the rezoning of 11 no. relatively small areas of land for residential use in accordance with national policy and also replaces the 'Long Term Strategic Reserve' designation from the Dunsink lands with local area plan designation. The sites are within, adjacent or contiguous with existing development boundaries across dispersed settlement areas. The provisions of the existing Fingal Development Plan 2023-2029 will provide for appropriate and adequate measures to avoid

Environmental Authority	Outline of Nature of the Submission	Response to consideration of nature of submission
	proposals for the installation of artificial pitches to replace existing playing fields used by SCI birds; the possibility of adverse effects on the integrity of SPAs as a result of the provision of artificial pitches reducing the foraging areas available to SCI species should consequently be evaluated in the AA and SEA carried out in relation to Proposed Variation No. 1. Such AA and SEA should also evaluate the possibility of microplastics originating from artificial pitches adversely affecting downstream waterbodies, including the estuarine and coastal SPAs and SACs.	adverse environmental impact and compliance with the findings of the Appropriate Assessment / NIR prepared for the existing Development Plan 2023-2029. The variation does not propose any changes to recreational or sports facilities and as such any potential considerations on such changes would be addressed under the project specific requirements for environmental assessments, including screenings for EIA and AA, as appropriate.

2.5 SEA Environmental Report

The current stage of the SEA process (Stage 3) involves the preparation of the Environmental Report for the identification, description, evaluation and mitigation of the potential environmental impacts associated with the Variation No.1 and the alternatives taking account of the geographical scope of the Plan.

Article 5(1) and Annex I of the *SEA Directive* provide detail on the information to be included in an Environmental Report. **Table 2.4** provides a checklist of the information referred to in Article 5(1) with a confirmation of where the relevant information is contained within the SEA.

The SEA Environmental Report was placed on public display, together with the Draft Variation No.1 and for comment from statutory bodies, the public and interested parties.

Table 2.4 Information required under Annex I of the SEA Directive

Information referred to in Article 5(1)	Environmental Report Section
(a) an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes;	Section 2 & Section 4
(b) the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme;	Section 5
(c) the environmental characteristics of areas likely to be significantly affected;	Section 5
(d) any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Directives 79/409/EEC and 92/43/EEC;	Section 5
(e) the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation;	Section 6
(f) the likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;	Section 8
(g) the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme;	Section 9 and Appendix 9.1
(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information;	Section 7
(i) a description of the measures envisaged concerning monitoring in accordance with Article 10;	Section 10
(j) a non-technical summary of the information provided under the above headings.	Refer to Non-technical Summary Report

2.6 SEA Statement

Following approval of the Variation No.1, an SEA Statement (Stage 4) will be prepared which includes information on:

- How environmental considerations have been integrated into the Variation No.1, highlighting the main changes to the Variation which resulted from the SEA process;
- How the SEA Environmental Report and consultations have been taken into account, summarising the key issues raised in consultations and in the Environmental Report indicating what action was taken in response;
- The reasons for choosing the Variation in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Variation, as adopted, was selected; and
- The measures decided upon to monitor the significant environmental effects of implementing the Variation.

2.7 Strategic Flood Risk Assessment

McCloy Consulting were appointed by Fingal County Council (FCC) to undertake a Strategic Flood Risk Assessment (SFRA) with respect to Variation 1 of the Fingal Development Plan 2023-2029. The SFRA concludes as follows:

> *'In summary, the proposed land use zonings for the thirteen sites included in the proposed variation are considered 'appropriate' as per the OPW Guidelines and do not require the application of a Plan-Making Justification Test.*
>
> *The Sequential Approach and guidance outlined in the OPW Guidelines and Fingal CDP SFRA should be applied in any future development proposals relevant to the subject variation sites.'*

Refer to the Flood Risk Assessment (McCloy 2025) prepared as part of the Variation No.1 for further details.

2.8 SEA Guidance

The SEA Environmental Report reflects the requirements of *Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment* (the *SEA Directive*) and the national implementing Regulations S.I. No. 436 of 2004, as amended by S.I. No. 201 of 2011, and by the PDR 2001, as amended.

The following principal sources of guidance were used in the SEA process including in the preparation of this Environmental Report:

- Directive 2001/42/EC on the assessment of Certain Plans and Programmes on the Environment.
- S.I. No. 436 of 2004 - Planning and Development (Strategic Environmental Assessment) Regulations 2004.
- S.I. No. 201 of 2011 - Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011.
- Planning and Development Act 2000, as amended.
- Planning and Development Regulations 2001, as amended.
- Guidance on Implementation of Directive 2001/42/EC, European Commission, 2004, at: http://ec.europa.eu/environment/archives/eia/pdf/030923_sea_guidance.pdf
- SEA of Local Authority Land Use Plans - EPA Recommendations and Resources. EPA, Version 1.27 updated October 2025.
- SEA Pack. EPA, Updated January 2024.
- SEA Spatial Information Sources Inventory. EPA, May 2025.
- SEA Resource Manual for Local and Regional Planning Authorities. EPA, 2015.
- Good Practice Guidance on Strategic Environmental Assessment (SEA) and Landscape. EPA, December 2023.

- Guidance on Strategic Environmental Assessment (SEA) Statements and Monitoring. EPA, March 2023.
- Good Practice Guidance on Cumulative Effects Assessment in Strategic Environmental Assessment. EPA, January 2020.
- Guidance on Strategic Environmental Assessment - Environmental Impact Assessment Tiering, EPA, 2021.
- Local Authority Climate Action Plan Guidelines. Department of the Environment, Climate and Communications, March 2023.
- EPA Mapping. Environmental Mapping / Geographical Information System (GIS) tools are available at: http://gis.epa.ie/SeeMaps
- EPA Water and Air Quality Reports at: https://www.epa.ie/pubs/legislation/air/quality/
- EPA Ireland's State of the Environment Report 2024, https://www.epa.ie/publications/monitoring--assessment/assessment/state-of-the-environment/irelands-state-of-the-environment-report-2024.php
- EPA Ireland's Environment – An Integrated Assessment 2020 at: https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/state-of-environment-report-/#
- SEA (EPA) Spatial Information Sources at: http://www.epa.ie/pubs/advice/ea/
- Developing and Assessing Alternatives in Strategic Environmental Assessment, EPA 2015 at: https://www.epa.ie/publications/research/biodiversity/EPA-157_web.pdf
- Integrating Climate Change into Strategic Environmental Assessment in Ireland - A Guidance Note. EPA, 2019.
- Climate Action Plan 2025. Department of Environment, Climate and Communications, 2025.
- Circular Letter PL 9/2013: Article 8 (Decision Making) of EU Directives 2001/42/EC on Strategic Environmental Assessment (SEA) as amended. Department of Environment, Community and Local Government, 2013.
- Circular Letter PSSP 6/2011: Further Transposition of EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA). Department of Environment, Community and Local Government, 2011.
- Circular Letter SEA 1/08 & NPWS 1/08: Appropriate Assessment of Land Use Plans. Department of Environment, Heritage and Local Government, 2008.
- Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual. Strive Report Series No. 106. Department of Environment, Community and Local Government, 2013.
- Guidance on Integrating Climate Change and Biodiversity into Strategic Environmental Assessment. European Commission 2013.
- Managing Natura 2000 Sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission, 2000, at: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/provision_of_art6_en.pdf
- Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission, 2002, at: http://ec.europa.eu/environment/nature/natura2000/management/docs/art6/natura_2000_assess_en.pdf
- Appropriate Assessment of Plans and Projects in Ireland. National Parks and Wildlife Service, 2009, at: http://www.npws.ie/publications/archive/NPWS_2009_AA_Guidance.pdf

2.9 Appropriate Assessment

The EU Habitats Directive (92/43/EEC) requires an Appropriate Assessment (AA) to be carried out where a plan or project is *likely to have a significant impact* on a Natura 2000 site. Natura 2000 sites include Special Areas of Conservation (SAC) and Special Protection Areas (SPA).

Stage 1 is to establish whether AA is required for the particular plan or project. This stage is referred to as 'screening for the requirement for AA', and its purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone or in combination with other plans or projects, could have significant effects on a Natura 2000 site, in view of the site's conservation objectives.

As set out in Department Circular Letter SEA 1/08 & NPWS 1/08[16] (15 February 2008), Screening for AA is of relevance to SEA screening in that *"where following screening, it is found that the draft plan or amendment may have an impact on the conservation status of a Natura 2000 site or that such an impact cannot be ruled out, adopting the precautionary approach:*

- *An AA of the plan must be carried out, and*
- *In any case where SEA would not otherwise be required, it must also be carried out."*

Hence, where a plan requires AA, it shall also require SEA.

A Stage 2 Appropriate Assessment (AA) and the preparation of a Natura Impact Statement (NIS) has been undertaken alongside the preparation of the Variation No.1 and the SEA Environmental Report.

The AA/NIS has concluded that the Variation No.1 will not affect the integrity of the Natura 2000 network.

[16] NPWS SEA letter: https://www.npws.ie/sites/default/files/general/circular-sea-01-08.pdf

3 Description of the Proposed Draft Variation No.1 to the Fingal Development Plan 2023-2029

3.1 Purpose of the Variation

The Revised National Planning Framework (NPF) was approved by the Oireachtas in April 2025. The Revised NPF sets high-level policy for national growth and development, revised to account for recent demographic changes.

The Revised NPF also sets updated targets for population and housing growth, with National Policy Objective 42 targeting the delivery of approximately 50,000 additional homes per annum to 2040. These new targets reflect the results of Census 2022 and research by the Economic and Social Research Institute (ESRI) and others.

Under Section 10 of the Planning and Development Act 2000, the Core Strategy of the Fingal Development Plan must be consistent with the national and regional development objectives of the National Planning Framework.

In July 2025, the Minister for Housing, Local Government and Heritage issued Section 28 Guidelines, NPF Implementation: Housing Growth Requirements and accompanying circular. These Guidelines provide detailed guidance on how City and County Councils should review their statutory development plans in order to incorporate the updated targets of the Revised NPF.

The Guidelines set new annual housing delivery targets for each local authority. Policy and Objective 1 of the Guidelines require these to be incorporated into City and County Development Plan, while Policy and Objective 2 allow for the provision of up to 50% over and above the housing growth requirement for each local authority.

Finally, Policy and Objective 3 require planning authorities to incorporate the objectives and targets set out in the Guidelines into City and County Development Plans as quickly as possible through the variation of adopted plans.

The Guidelines also state that planning authorities should review the adequacy and capacity of existing zoned lands and consider the zoning of alternative lands where necessary.

Fingal County Council has reviewed the Core Strategy of the Fingal Development Plan 2023-2029 (FDP) and in order to ensure consistency with the Revised NPF and NPF Implementation: Housing Growth Requirements Guidelines, this Variation is now proposed.

It is noted that the National Planning Framework (First Revision) was subject to full Strategic Environment Assessment (SEA) and Stage 2 Appropriate Assessment (AA).

3.2 Existing Housing Target Requirements

The existing Core Strategy of the Fingal Development Plan 2023-2029 sets population and housing growth targets for each area and settlement in the County to 2029. These targets are consistent with the previous 2018 version of the National Planning Framework and the 2020 *Housing Supply Target Methodology for Development Planning* Guidelines, which have now been superseded.

The purpose of the Core Strategy is to set the expected population, housing, and employment growth for the County, to set overall land use zoning targets, and to provide a settlement hierarchy for the County which directs development appropriately over the plan period. The Core Strategy must be consistent with the National Planning Framework, the Regional Spatial and Economic Strategy for the Eastern and Midlands Region, and relevant national guidelines.

The current Core Strategy sets the following housing growth requirements for the County for the period 2023-2029, based on previous national population and housing projections:

Table 3.1 Existing Population and Housing requirements (FDP 2023-2029 Core Strategy)

Existing Housing Supply Target 2023-2029	Existing Annual Housing Supply Target	Total Residential Zoned Land (Ha.) (2023)	Capacity (Homes, 2023)	Annual Housing Capacity
16,425 homes	2,738 homes/year	1,014	35,001	5,834

3.3 NPF Implementation: Housing Growth Requirements Guidelines

The *NPF Implementation: Housing Growth Requirements* Guidelines published in July 2025 provide updated targets for housing supply at local authority level. The targets are based on population and housing demand projections undertaken by the Economic and Social Research Institute (ESRI) in 2024 (incorporated into the NPF First Revision) and on unmet structural housing demand since 2016. The Guidelines set a target of addressing this unmet demand in the near term and up to 2034.

The Guidelines set new, long-run "Annual New Housing Growth Requirements" for each local authority to 2034 and beyond to 2040.

Table 3.2 New Annual Housing Targets 2025-2040 from NPF Implementation Guidelines

Timeframe	National	Fingal
2025-2034	55,598/year	3,153/year
2035-2040	41,312/year	2,146/year
Total	803,852 homes	44,406 homes

The Guidelines also provide for 'additional provision' of up to 50% above the baseline housing growth requirement, which recognises that a proportion of zoned lands are not activated over the period of a development plan. This is an increase from the 25% uplift previously allowable. Policy and Objective 2 states that this 'additional provision' of up to 50% should be reflected within the relevant City or County Development Plan.

The Guidelines also state that additional provision should be justified, and that "*the criteria for the selection of land and sites should be carried out in accordance with the existing provisions of the "Development Plans - Guidelines for Planning Authorities" (2022).*"

The current Fingal Development Plan is due to expire in April 2029. Under the Planning and Development Act 2024, new development plans will have a 10-year lifespan. The NPF Implementation Guidelines therefore state that planning authorities "*should consider as an immediate priority the suitability of lands for development over a 12 year plus period (to encompass the remaining period of the current adopted plan and the lifespan of the new 10-year development plan).*"

3.4 Revised housing requirements

The following table sets out the new housing requirements for Fingal as set by Appendix 1 of the *NPF Implementation: Housing Growth Requirements* Guidelines, and the potential maximum 50% additional provision. The Guidelines set a new annual housing growth requirement of 3,153 homes for Fingal to 2034.

It is recommended that the full allowance of additional provision (i.e. an additional 50%) should be accounted for in reviewing the Core Strategy. The Revised National Planning Framework population and housing growth projections run to 2040. As a result, the Guidelines set annual housing requirements for Fingal which run to 2040. This also reflects the aim for longer-term and more strategic 10-year development plans under the Planning and Development Act 2024. The targets aim for unmet demand from 2017 to 2024 to be cleared over the period 2025-2034; as a result, annual targets are slightly lower from 2035.

Table 3.3 Housing Requirements for Fingal County Council as set out in the NPF Implementation Guidelines

Percentage of Baseline Requirements	Existing Annual 2023 Housing Requirement (Housing Supply Target)	Adopted Development Plan – Annual Housing Requirement (Housing Supply Target)	New Annual Housing Growth Requirement to 2034	New Annual New Housing Growth Requirement 2035 to 2040
100%	1,717 homes	2,738 homes	3,153	2,146
150%	N/A	N/A	4,730	3,219

Table 3.4 Total Housing Requirements for Fingal County Council to 2029

Adopted Plan Annual (Target & Capacity)	New Annual to 2034	150% New Annual	Requirement with headroom 2025 to 2029	New CDP requirement 2023 to 2029
2,738 homes target, 5,834 homes capacity	3,153	4,730	23,650	29,126

3.5 Summary of Land Available and Land Required

The existing Development Plan Core Strategy (which was prepared having regard to the requirements of the previous 'Housing Supply Target Methodology' Guidelines (2020)) provided sufficient residential zoned land to meet the original, adopted housing supply target.

However, the Revised NPF and the NPF Implementation Guidelines have set a new, higher housing target. They have also set a new potential allowance for additional zoned land provision of 50% above baseline requirements, which is based on a recognition by Government of the need to account for headroom and lands not activated.

The previous targets for 2023-2024, alongside the new targets for 2025-2029 and planning for 50% additional provision, result in a total requirement of 29,126 for the whole Development Plan period. A total of 6,770 new units has been completed under the current Development Plan (to Q3 2025), leaving 22,356 outstanding. With identified residential zoned land capacity (not including permissions) of 17,700, a shortfall of c. 4,600 is identified.

4 Approach to Proposed Variation

In order to maintain a robust supply of residential zoned land for development, it is recommended to provide for lands sufficient for approximately 5,000 new units, through the following measures:

- To vary the Fingal Development Plan 2023-2029 to provide for lands sufficient for approximately 5,000 new units, with the following amendments recommended:
  - To vary the Fingal Development Plan 2023-2029 to zone for approximately 2,500 residential units on additional residential-zoned land, in order to provide in part for the additional housing land supply necessary to meet Fingal County Council's new annual housing delivery requirement.
  - To vary the Fingal Development Plan to remove the 'Long-Term Strategic Reserve' designation for Dunsink and to provide that development in Dunsink will be in accordance with a forthcoming Local Area Plan for the area. This will provide a plan-led approach to the development of Dunsink and will facilitate the early release of the remainder of the additional housing land required for the County to 2029, with capacity for approximately 2,500 new units.
- To vary Fingal Development Plan to update Table 2.14 (the Core Strategy table) to reflect the new housing delivery requirement, to allocate this requirement across the settlement hierarchy, and to reflect updated zoned land allocations.
- To vary the Fingal Development Plan to incorporate a series of amendments to the text necessary to reflect the above changes and the adoption of the Revised National Planning Framework.
- To progress a statutory Local Area Plan for Dunsink in Q1 2026.

4.1 Additional Land Use Zonings

In order to maintain the supply of suitable residential zoned lands for development, it is recommended to re-zone a limited quantity of lands not currently zoned for residential development. This will comprise land with capacity for approximately 2,500 units.

The Development Plan Guidelines (2022) and the Revised National Planning Framework set criteria for choosing lands for development. These prioritise lands that are serviced or capable of being serviced within the short term, including connections to transportation access, water supply, and foul and surface water drainage.

The Revised NPF also requires at least 40% of all homes nationally, and 50% of new homes targeted in Dublin City and Suburbs, to be within existing built-up settlement footprints, and requires compact and sequential patterns of growth.

Lands have been examined across the County and sites potentially suitable for development have been identified. The sites recommended for re-zoning to residential uses have therefore been identified on the basis of the proper planning and sustainable development of the County and the need to ensure the compact growth and sequential development of existing settlements.

The ongoing selection of land suitable for re-zoning is also informed by the County's settlement hierarchy, as set out in the Core Strategy of the Development Plan. Furthermore, this exercise has focussed on lands that could be brought forward in the short term (by 2029), and lands that require significant infrastructure provision are not recommended for re-zoning at this stage.

While the land selected are not currently zoned for residential development, the final recommendation will comply with the requirements of the Development Plan Guidelines and relevant national and regional requirements. The intended outcome of this exercise is to identify and recommend lands that have access to necessary infrastructure and social services, have no significant challenges or impediments to development and have capacity to deliver new housing within the lifetime of the Development Plan.

It is envisaged that the lands to be identified will have the capacity to deliver in the region of 2,500 new units during the lifetime of the Fingal Development Plan 2023-2029.

These lands include the following:

- Site 4.1 (c. 3.9 ha) on Sheet 4 – School Lane, Balrothery: rezone from 'GB' Green Belt to 'RA' Residential Area and amend development boundary accordingly
- Site 5.1 (c. 10.5 ha) on Sheet 5 – Holmpatrick, Skerries: rezone from 'GB' Green Belt and 'OS' Open Space to 'RA' Residential Area and amend development boundary accordingly
- Site 6A.1 (c. 3.6 ha) on Sheet 6A – Causetown, Lusk: rezone from 'OS' Open Space and 'RU' Rural to 'RA' Residential Area and amend development boundary accordingly
- Site 6A.2 (c. 5.7 ha) on Sheet 6A – Racecourse Road, Lusk: rezone from 'RU' Rural to 'RA' Residential Area and amend development boundary accordingly
- Site 9.1 (c. 6.4 ha) on Sheet 9 – Seamount, Malahide: rezone from 'RU' Rural To 'RA' Residential Area and inclusion of new Local Objective A - *Facilitate the provision of east/west and north/south linkages to ensure permeability within the area* and amend development boundary accordingly
- Site 9.2 (c. 10.8 ha) on Sheet 9 – Broomfield West, Malahide: rezone from 'GB' Green Belt To 'RA' Residential Area and amend development boundary accordingly
- Site 9.3 (c. 1.2 ha) on Sheet 9 – Greenwood, Kinsealy: rezone from 'GB' Green Belt to 'RV' Rural Village and amend development boundary accordingly
- Site 9.4 (c. 7.1 ha) on Sheet 9 – Kinsealy Lane, Kinsealy: rezone from 'GB' Green Belt To: 'RV' Rural Village and inclusion of new Local Objective B - *Facilitate the provision of north/south linkages to ensure pedestrian and active travel linkages within the area* and amend development boundary accordingly
- Site 9.5 (c. 2.7 ha) on Sheet 9 – Hole in the Wall Road: rezone from 'GB' Green Belt To: 'RA' Residential Area and amend development boundary accordingly
- Site 13.1 (c. 9.1 ha) on Sheet 13 – West of Barnhill: rezone from 'GB' Green Belt To: 'RA' Residential Area and amend development boundary accordingly
- Site 13.2 (c. 0.52 ha) on Sheet 13 – Clonsilla Road, Clonsilla: rezone from 'OS' Open Space To: 'RA' Residential Area and amend development boundary accordingly
- Site 13.3 (c. 435.9 ha) on Sheet 13 Strategic Land Reserve Designation: Replace Long Term Strategic Reserve designation with Local Area Plan designation

4.2 Long Term Strategic Reserve at Dunsink

It is further recommended that the Council provide for the release of lands currently zoned for residential development but designated as Long-Term Strategic Reserve. There are two Strategic Reserve areas in the County, at Dunsink (including 160 ha. of residential zoned land) and Lissenhall (224 ha. of mixed-use zoned land). Both areas are recognised as significant longer-term strategic landbanks in the Dublin Metropolitan Area Strategic Plan (MASP) of the Eastern and Midlands Regional Spatial and Economic Strategy (RSES) 2019-2031.

Lands at Lissenhall are not suitable for development at present. These lands require improvements to surrounding transport infrastructure including the progression of the Metrolink. Dunsink comprises the largest bank of undeveloped land within the M50 and is strategically located. It is recognised as a major strategic landbank in the RSES with long term potential to develop a new district centre, subject to enabling infrastructure including the LUAS extension to Finglas.

Work has progressed to prepare a local statutory plan for Dunsink, in line with Objective CSO31 of the Development Plan. This builds on the feasibility study undertaken for the area. It is recommended that the Council now provide for the progression of a limited portion of lands at Dunsink, with capacity for approximately 2,500 units. This is to be progressed in a phased approach, given the scale and nature of Dunsink and the requirement to adopt a longer-term strategic approach to ensure the creation of a sustainable future neighbourhood.

The statutory plan for entirety of the lands at Dunsink, a draft Local Area Plan, will be published in early 2026. This LAP will provide for the phasing of Dunsink lands, with the first phase to allow land for approximately 2,500 units and associated services/infrastructure to be progressed under the current Development Plan.

Dunsink presents a unique opportunity for the sustainable development of a well-located new neighbourhood within the M50. The LUAS extension to Finglas has received planning permission, and the Council is in a strong position to plan for necessary infrastructure and funding and to provide infrastructure and housing on publicly owned lands in the area.

It is recommended that the Fingal Development Plan 2023-2029 be varied to remove the 'Long Term Strategic Reserve' designation from the Dunsink lands. It is also recommended that the text of relevant portions of the Development Plan be amended to reflect the new plan-led approach to Dunsink and to facilitate the early release of the remainder of the additional housing land required for the County to 2029.

4.3 Other Required Amendments to the Development Plan

The changes in housing targets and the recommended release of lands outlined in this report would necessitate several amendments to the text of the Fingal Development Plan 2023-2029. These are required to ensure consistency with the Revised NPF, the NPF Implementation Guidelines, and the recommended land use zoning and designation changes. It is proposed that all consequent amendments are included as part of this Variation to the Development Plan.

These amendments include re-drafting Table 2.14 of the Development Plan (the Core Strategy Table). This is to reflect the new housing requirement, to allocate the new requirement across the settlement hierarchy, and to outline total lands zoned across the County. The existing County settlement hierarchy will remain in place, and the distribution of new residential zoned lands has been guided by the settlement hierarchy as required by national and regional policy.

Furthermore, a series of changes to the text of Chapter 2 of the Development Plan are required. All references to the previous Housing Supply Target are to be replaced with the new housing growth requirement. As noted, policy related to Dunsink would also be amended to reflect the accelerated progression of a statutory plan for the area.

4.4 Compliance with National and Regional policy

The Variation has been informed by the proper planning and sustainable development of the County and by relevant national and regional policy. In particular, the Revised National Planning Framework puts compact growth and sustainable development at the heart of the planning system. The recommended provision of additional residential zoned land for approximately 5,000 new units would prioritise lands within or contiguous to existing settlements.

Half of the recommended land provision will comprise the release of long-term strategic reserve lands in Dunsink. These lands are within the Dublin City and Suburbs urban area and can be connected to existing and planned services and transportation. The variation therefore would comply with National Policy Objective (NPO) 4 of the Revised NPF, which requires at least half of future population growth to be focused on the existing cities and their suburbs.

The Variation will also comply with NPOs 7-9, which required at least 40% of all homes nationally (50% targeted for cities and 30% for other settlements) to be within the built-up footprint of existing settlements.

The site selection process has prioritised lands that can deliver compact and sequential patterns of growth. It has also prioritised lands that can be accessed by public transportation. This also ensures that denser and more sustainable patterns of development can be achieved, avoiding car-dependent urban sprawl-type growth and more efficient land use.

4.5 Revisions to Objectives within the Fingal Development Plan 2023-2029

The proposed changes to the text of the Written Statement are set out in detail in the Draft Variation No.1 and include the location (page number) and section the proposed alteration relates to in the Written Statement.

Deletions to the text are shown in ~~red text with a strikethrough~~. New text to be inserted is shown in *green text*. The revisions to the objectives of the Fingal Development Plan 2023-2029 are summarised below.

- **Chapter 2, Objective CSO8, page 58**

  Amend the text as follows:

  Objective CSO8 – Protection of Long-Term Strategic Reserve

  Protect the long-term strategic reserve land bank~~s~~ *at Lissenhall* for potential future residential growth and to restrict development except for reasonable intensification of, extensions to and improvement of premises within these areas, subject to normal planning criteria.

- **Chapter 2, Section 2.7,2 Policies and Objectives, page 80**

  Amend the text as follows:

  Objective CSO31 – Dunsink

  Prepare a local ~~statutory~~ *area* plan for the ~~Long Term~~ ~~S~~*s*trategic ~~Reserve~~ land~~s~~ *bank* at Dunsink during the lifetime of this Development Plan, in consultation with the relevant stakeholders, including an infrastructural audit with costings and implementation strategy to enable sustainable regeneration and development of the area that is cognisant of, and sensitive to the significant historic buildings within the area including the nationally important architectural heritage site of Dunsink Observatory. This plan shall include Dunsink Observatory lands and the provision of a Planetarium.

- **Appendix 8, Map Based Local Objectives, page 227**

  Amend the following:

  Local Objective 104

  The Council will have due regard to the FCC document 'Feasibility Study – Dunsink Lands, Co. Dublin' (February 2022) and its accompanying statements (comprising Surface Water

Management Plan, Transport Appraisal and Area Based Transport Assessment) in the preparation of a local *area* ~~statutory~~ plan for lands at Dunsink in order to ensure the realisation of the development vision for Dunsink set out on p.26 of the Feasibility Study as follows: "Development of a low-carbon mixed-use transit-orientated urban quarter which prioritises active travel and public transport modes both within and outside, is well connected to the wider City via high quality public transport and active travel infrastructure and seeks to protect and enhance the environmental and historic character of the area."

- Appendix 8, Map Based Local Objectives, page 229

  Include the following new local objective relating to lands to the south of Seamount Road, Malahide:

  Local Objective A

  Facilitate the provision of east/west and north/south linkages to ensure permeability within the area.

- Appendix 8, Map Based Local Objectives, page 229

  Include the following new local objective relating to lands east of Kinsealy Lane, Kinsealy:

  Local Objective B

  Facilitate the provision of north/south linkages to ensure pedestrian / cycle permeability within the area.

5 Relationship to Relevant Plans and Programmes

5.1 Overview

The Fingal Development Plan 2023-2029, including Variation No.1, has been prepared in accordance with the Planning and Development Act, 2000 (as amended) which sets out the statutory requirements and content of a development plan. In accordance with the Planning and Development Act, the Plan is strategic in nature for the purposes of developing objectives to deliver an overall strategy for the proper planning and sustainable development of the county and has taken account of the statutory obligations of the Council and the relevant policies or objectives of the Government or Ministers of the Government.

As part of the SEA process, it is necessary to consider the environmental protection objectives, established at the international; European and national level which are relevant to the Variation No.1 and how they have been taken into account during the preparation of the Plan. In its making, the Variation No.1 must comply with relevant higher-level strategic actions / plans. These documents include plans and programmes, which have also been subject to their own environmental assessment processes, as relevant, are detailed below.

5.2 Planning Hierarchy

The Variation No.1 has been framed within a hierarchy of other plans and programmes which range from international to county level. Development plans are formed by International, National and Regional level policy guidelines. This hierarchy of plans, programmes, policies, strategies, *etc.* sets the legislative and policy framework by which the County Development Plan must be formulated or varied. The International, National and Regional policies play a central role in establishing higher-level agendas and the county-level plan objectives. The Variation No.1 is required to have regard to the objectives of these higher level plans, in particular the regional level plans, to a county level basis. A review of higher-level plans / programmes will be undertaken as will key environmental legislation which informs the environmental protection policies contained within the plan.

In this instance, Variation No.1 must comply with the requirements of the EU and National Planning and Development-related legislation, as well as higher level plans including Project Ireland 2040: National Planning Framework (NPF); the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region and National Plans (refer to **Tables 5.1** to **5.3**). The objectives of the NPF is applied on a regional basis through statutory Regional Spatial and Economic Strategies (RSES). The RSES must accord with the NPF and in turn, local authority development plans which address further detailed local matters, must be in accordance with the RSES. The Plan complies with a wide range of theme related plans and programmes such as the River Basin Management Plans, National Waste Management Plan, Climate Action Plan, etc. (refer to **Table 5.2**). Being a county-level plan, the Plan sets the framework for lower-level plans, such as local area plans and other county and lower level plans and programmes (refer to **Table 5.3**). Both the NPF and RSES, as well as the majority of other and lower level plans have also been subject to the Strategic Environmental Assessment (SEA) process.

The relationship with other plans and programmes is discussed, as appropriate, under the Current State of the Environment in **Section 5** of this Report.

There is a legislative framework for the protection of the environment and our natural resources relevant to the Variation No.1. **Table 5.1** below provides a list of the principle legislative framework.

Table 5.2 and **Table 5.3** below provides a working list of the principal plans and programmes influencing the study area, either directly or through European, National and / or County level policy.

Table 5.1 Legislative Framework

Legislative Framework	
Planning and Development Act 2000, as amended	Environmental Noise Directive (2002/49/EC)
Planning and Development Regulations 2001, as amended	Environmental Liability Directive (2004/35/EC)
Strategic Environmental Assessment (SEA) Directive (2001/42/EEC)	Fourth Daughter Directive (2004/107/EC)
Environmental Impact Assessment Directive (2011/92/EU) as amended by (2014/52/EU)	Renewable Energy Directive (2018/2001/EU) as amended by (EU/2023/2413)
Habitats Directive (92/43/EEC)	European Communities (Birds and Natural Habitats Regulations) 2011 (S.I. No. 477 of 2011) (as amended)
Birds Directive (2009/147/EC) on the Conservation of Wild Birds, 1979	Renewable Energies in the 21st Century: Building a More Sustainable Future
Water Framework Directive (WFD) (2000/60/EC)	EU 2020 climate and energy package
Groundwater Directive (2006/118/EC)	EU Renewable Energy Road Map
Flood Directive (2007/60/EC)	European Landscape Convention 2000
Bathing Water Directive (2006/7/EC)	Wildlife Acts 1976-2024
Shellfish Waters Directive (2006/113/EC)	The Water Services Act 2007, as amended
Marine Strategy Framework Directive (2008/56/EC)	Foreshore Act 1933, as amended
Urban Wastewater Directive (91/271/EEC)	Aquaculture Act 1997, as amended
Drinking Water Directive (98/83/EC)	Sea Fisheries & Maritime Jurisdiction Act 2006
Waste Framework Directive (2008/98/EC)	The National Monuments Act 1930-2014
EU Landfill Directive (1999/31/EC)	Roads Act 1993, as amended
Water Environment (Abstractions and Associated Impoundments) Act 2022	European Union (Birds and Natural Habitats) (Sea Fisheries) Regulations 2013, as amended
Air Quality Directive (2008/50/EC)	Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023
Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe	

Table 5.2 Relevant National Plans and Programmes

National & Regional Plans and Programmes	
National Planning Framework (NPF) Project 2040	National Policy Position on Climate Action and Low Carbon Development
National Planning Framework First Revision (April, 2025)	Sectoral Climate Change Adaption Strategies and Low Carbon Roadmaps
National Development Plan (NDP) 2021-2030	Spatial Planning and National Roads Guidelines (2012)
Regional Planning Guidelines for the Greater Dublin Area 2010-2022	National Sustainable Mobility Policy (2022)

National & Regional Plans and Programmes	
Regional Spatial and Economic Strategy (RSES) 2019-2031 for the Eastern Midland Regional Assembly (EMRA)	The Traffic and Transport Assessment Guidelines (2014)
Ireland's Environment - An Integrated Assessment 2020	Transport Strategy for the Greater Dublin Area 2022-2042
National Mitigation Plan 2017	Design Manual for Urban Roads and Streets (2019)
Our Sustainable Future - A Framework for Sustainable Development for Ireland (2012)	The National Renewable Energy Action Plan
Delivering Homes, Building Communities 2025-2030: An Action Plan on Housing Supply and Targeting Homelessness (2025)	National Energy Efficiency Action Plan 2017-2020
Design Standards for Apartments, Guidelines for Planning Authorities (2025)	Strategy for the Future Development of National and Regional Greenways 2018
Rebuilding Ireland: Action Plan for Housing and Homelessness - 2016	The National Broadband Plan 2020
Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities (2024)	National Landscape Strategy for Ireland 2015-2025
National 4th Biodiversity Action Plan 2023-2030	Architectural Heritage Protection Guidelines for Planning Authorities (2011)
National Planning Framework	Heritage Ireland 2030
National Strategic Plan for Aquaculture Development 2014- 2020	Food Harvest 2020
National CFRAMS Programme	National Adaptation Framework Planning for a Climate Resilient Ireland 2018 and Review of the National Adaptation Framework 2022
River Basin Management Plan for Ireland 2018-2021	Climate Action Plan 2025
River Basin Management Plan 2022-2027	Water Services Strategic Plan / Capital Investment Programme (Uisce Éireann)
Water Action Plan 2024, A River Basin Management Plan for Ireland	Ireland's State of the Environment Report 2024
The Planning System and Flood Risk Management (2009)	Eastern Catchment Flood Risk Assessment and Management (CFRAM) Study
Waste Action Plan for Circular Economy – Ireland's National Waste Policy 2020-2025	National Waste Management Plan for a Circular Economy 2023-2029

Table 5.3 Relevant Local Plans and Programmes

Local Plans and Programmes	
FCC Delivery for All Corporate Plan 2025-2029	Noise Action Plan for Dublin Airport 2024-2028
FCC Local Economic & Community Plan 2023-2028	FCC Culture and Creativity Strategy 2023-2027
FCC Three Year Capital Programme 2026-2028	FCC Age Friendly Strategy 2018-2023
FCC Climate Change Action Plan 2024-2029	FCC Migrant Integration and Social Cohesion Strategy 2019-2024

Local Plans and Programmes	
FCC Biodiversity Plan 2023-2030	FCC Traveller Accommodation Programme (TAP) 2019-2024
FCC Heritage Plan 2024-2030	FCC Healthy Fingal Strategic Plan 2021-2025
FCC Forest of Fingal - A Tree Strategy for Fingal (Draft)	FCC Sports Office Vision Statement 2019-2021
The Geological Heritage of Fingal 2007	FCC Tourism Statement of Strategy and Work Programme 2017-2022
FCC Strategic Plan for Housing People with Disability 2021-2026	FCC Fingal Libraries Development Plan 2024-2029
FCC Social Inclusion Community & Activation Programme 2024-2028	FCC Arts Plan 2019-2025
Noise Action Plan for the Agglomeration of Dublin 2024-2028	FCC Digital Strategy 2020-2023
Noise Action Plan for Fingal County 2019-2023	FCC Litter Management Plan 2025-2028

6 Environmental Baseline and Issues

6.1 Introduction

Baseline data assists in assessing the current state of the environment, facilitating the identification, evaluation and subsequent monitoring of the effects of the Plan. Thus, this information creates a platform whereby existing issues relevant to Variation No.1 can be quantified, where possible, or qualified thereby ensuring that the implementation of Variation No.1 does not exacerbate identifiable problems.

In line with the SEA Directive, short, medium and long-term effects (including reference to secondary, cumulative, synergistic, permanent and temporary, positive and negative effects) will be considered during the assessment. In accordance with S.I. 436 of 2004, as amended, consideration has been given to whether the environmental effects, both positive and negative, of Variation No.1 are likely to be significant.

Baseline data will be collected for the various environmental receptors described in the SEA Directive *i.e.* biodiversity, population, human health, fauna, flora, soil, water, air, climate factors, material assets, cultural heritage including architectural and archaeological heritage and landscape.

This is a first step in the process of evaluating the sensitivity of the environment. The SEA Directive requires that information is provided on '*any existing environmental problems which are relevant to the Plan or programme*'. Information is therefore provided on existing environmental problems which are relevant to the Plan, thus helping to ensure that the Plan does not exacerbate any existing environmental problems in the study area.

The environmental aspects are described in line with the legislative requirements, under the following headings:

- Biodiversity (including Flora & Fauna);
- Population and Human Health;
- Land, Soils and Geology;
- Water Quality;
- Air, Noise and Climate;
- Cultural Heritage;
- Landscape;
- Material Assets;
- Interaction of the foregoing; and
- Cumulative Impacts.

6.1.1 Geographical Area of the Plan

Fingal County is one of four Local Authority areas in the Dublin region. The Plan covers the administrative area of Fingal County, which is 452 square kilometres metres (sq.km) in extent, and includes 88km of coastline, which stretches from Howth Head up to Balbriggan. Fingal hosts a variety of landscapes, enjoys significant economic advantages and is the fastest growing county in Ireland.

Dublin International Airport is the country's primary airport serving both Dublin and the country and is located within Fingal. Fingal is well served by air, rail and national roads and the county has one of the youngest and most diverse populations in the State. Fingal has experienced significant population and economic development since the adoption of the current Plan.

6.2 Biodiversity

6.2.1 Introduction

Biodiversity plays a significant role in the provision of clean air, water, healthy soils and food as well as visually contributing to a plan area with its natural beauty and heritage. Ireland has a rich diversity of ecosystems and wildlife in its terrestrial, freshwater and marine environments. However, over the last few decades, human impacts on biodiversity have accelerated and resulted in increased damage and loss of habitats and species, the diversification of wildlife and the degradation of our environment. On a global scale, biodiversity loss has been identified as one of the biggest threats facing humanity in the next decade.

Biodiversity is vulnerable to climate change as it accelerates the destruction of the natural world through droughts, flooding and wildfires, while the loss and unsustainable use of nature are in turn key drivers of climate change. However biodiversity and nature are also vital in the fight against climate change.

6.2.2 Overview of Biodiversity in Fingal

Fingal County lies to the north of Dublin City and has an administrative footprint of 452 sq.km. Fingal has a rich biodiversity resource with its coast, countryside, and urban centres. Fingal stretches from the River Liffey and the Dublin City boundary in the south to the Meath boundary north of Balbriggan, and eastwards from the coast to the Meath and Kildare boundaries in the west. The county has a diverse character including both urban and rural areas, the coast, river valleys and upland areas.

Fingal hosts a wealth of wildlife including a range of threatened habitats and species which are protected by law. Some of the most important sites for wildlife can be found along the coast. Baldoyle, Malahide and Rogerstown estuaries and the islands[17] off the Fingal coast host a range of important habitats and species as well as being home to thousands of breeding and migratory birds. The sheltered waters of the estuaries provide nursery areas for many fish species that live out in the sea such as Herring, Seabass, Cod and Pollack.

The extensive sand dune systems at Rush, Portrane, Donabate, Malahide, and Portmanock are some of our richest biodiversity hotspots in the county. They are also amongst the most fragile habitats around the Fingal coast and unfortunately much of the dune habitat is covered by golf courses, holiday homes or caravan parks.

The inshore waters of the Irish Sea along the Fingal coast are classified as an important spawning and nursery area for several commercially important fish species such as Cod, Whiting, Place, Herring and Mackerel. These fish species spend their juvenile period in the calm waters in the estuaries and along the shore, before moving out to the Irish Sea.

Despite its close proximity to Dublin City, much of Fingal County is still in agricultural use. Arable land and improved grassland make up most of the Fingal countryside. The bulk of the arable land is found in the fertile and well drained eastern part of the county, where the soils are particularly suited to market gardening, potato and cereal production. Livestock production is more common in the western part of the county.

[17] There are six islands located just off the Fingal coast - Ireland’s Eye, Lambay, Colt, St. Patrick’s, Shenick and Rockabill

The countryside also supports large numbers of the more general flora and fauna species and although these species may not be rare or protected itself, they are all part of the interrelated natural fabric of the countryside.

Fingal has an extensive network of rivers and streams. The most important rivers are the Delvin, Matt, Corduff, Ballyboughal, Broadmeadow, Ward, Tolka, Liffey, Santry, Sluice and the Mayne River.

- Special Areas of Conservation (SAC), Special Protection Areas (SPAs), Natural Heritage Areas (NHAs), which are designated within / adjacent to the Plan area.
- Key ecological sensitivities within the county include those relating to:
- Proposed Natural Heritage Areas (pNHA).
- Ecological networks and connectivity.
- Lakes, canals, woodlands, wetlands, sand dunes, saltmarshes, grasslands and hedgerows.
- Aquatic and riverine ecology associated with various rivers and their tributaries and riparian buffer zones.
- Land cover mapping - CORINE.
- Nature Reserves.
- Certain entries to the Water Framework Directive Register of Protected Areas.
- Tree Preservation Orders (TPOs).
- Other sites of high biodiversity value or ecological importance.
- Watercourses and coastal zones.

6.2.3 Biodiversity Action Plan

Ireland's fourth *National Biodiversity Action Plan* (NBAP) sets national biodiversity agenda for the period 2023-2030. The Plan's vision for Ireland in 2050 is as follows:

Biodiversity in Ireland is valued, conserved, restored and sustainably used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.

The key objectives of the NBAP are as follows:

- Adopt a Whole-of Government, Whole of-Society Approach to Biodiversity;
- Meet Urgent Conservation and Restoration Needs;
- Secure Nature's Contribution to People;
- Enhance the Evidence Base for Action on Biodiversity;
- Strengthen Ireland's Contribution to International Biodiversity Initiatives.

6.2.3.1 Fingal Biodiversity Action Plan 2023-2030

The Fingal Biodiversity Action Plan (BAP) 2023-2030, highlights the importance and need to conserve and enhance Fingal's natural heritage, with an ambitious programme of actions to protect the habitats, plants and animals that can be found in Fingal.

The Fingal Biodiversity Action Plan puts forward an ambitious programme of a hundred actions to reverse the decline in biodiversity by 2030. The objectives of the Fingal BAP are:

- To increase our knowledge and understanding of biodiversity and monitor impacts of biodiversity actions through ecological research.
- To develop and maintain the Fingal Ecological Network and increase the resilience of the network by restoring degraded habitats and habitat creation.
- Tackle key pressures on species and habitats.
- To ensure that (inter)national targets for species and habitats are translated into effective conservation action at local level in Fingal.

- To raise public awareness and encourage involvement in biodiversity action by the wider community.

6.2.4 Ecological Networks and Connectivity

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

The networks are considered imperative in connecting areas of biodiversity within the county to each other, thus avoiding the creation of isolated islands of habitat. These corridors are particularly important for mammals, small birds and bats.

The county has a number of undeveloped or protected corridors of land, which act as links from the surrounding countryside into South Dublin, Meath, Kildare and into the urban core of Dublin City. The key corridors in Fingal are along the major rivers, including their floodplains and the adjacent farmland or parkland. The Liffey, Tolka, Ward, Broadmeadow, Ballyboghil, Corduff and Sluice rivers and their tributaries, are salmonid systems and are therefore of particular significance. These ecological networks and protected corridors include:

- Core Biodiversity Conservation Areas: Ramsar sites, Natura 2000 sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPAs)), Natural Heritage Areas (NHA), proposed Natural Heritage Areas (pNHA), Statutory Nature Reserves, Refuges for Fauna, Annex I habitats outside designated sites, habitats of protected or rare flora.
- Ecological Buffer Zones around the Core.
- Nature Development Areas.
- Ecological Corridors and Stepping Stones.
- River Corridors along major rivers (River Liffey, River Tolka, River Ward, Broadmeadow River, Delvin River, Mayne River and Sluice River).
- Liffey Valley, connecting Wicklow, Kildare, South Dublin, Fingal and Dublin City.
- Royal Canal connects the River Shannon to Fingal / Dublin City and River Liffey / Dublin Bay.

Other corridors include:

- River Matt, River Corduff, River Ballyboghil and River Santry. These corridors are not subject to environmental designation.

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as treelines, hedgerows and rivers / streams which provide corridors or stepping stones for wildlife species moving within their normal range.

In Ireland, urban streams are largely culverted underground, fenced off, overgrown (sometimes with invasive species) and sometimes polluted and used for illegal dumping. Such streams and watercourses represent missed opportunities for amenity and biodiversity. The EU Biodiversity Strategy for 2030 outlines the greater efforts are needed to restore freshwater ecosystems and the natural functions of rivers in order to meet the objectives of the WFD. Such measures include the removal or adjusting barriers that prevent the passage of migrating fish and improving the flow of water and sediments.

6.2.4.1 Ecosystem Services

Ecosystem services are the benefits that natural environments supply to human beings either directly or indirectly. The National Biodiversity Plan has adopted four main categories of ecosystem services, namely provisioning services, regulating services, supporting services, and cultural services.

- Provisioning services refer to products obtained from ecosystems, such as food, fibre, fuel, clean water, medicines and genetic resources.
- Regulating services refer to the benefits of managing ecosystem processes, such as carbon sequestration, flood control, water purification, waste decomposition, and pest control.
- Supporting services are those which are necessary for the production of all other ecosystem services, and include soil fertility and crop pollination.
- Cultural services are the non-material benefits people obtain from ecosystems through cognitive development, inspiration, recreation, and aesthetic experiences.

6.2.5 Green and Blue Infrastructure

The *European Green Infrastructure Strategy* promotes the development of Green Infrastructure and guides its implementation at EU, regional, national and local levels.

Green infrastructure can be defined as an interconnected network of natural space that conserves natural ecosystem values and functions and provides associated benefits to human populations. Green infrastructure refers to our green spaces including parks, gardens, open amenity space, cemeteries, woodlands, hedgerows of biodiversity and heritage importance which form barony, parish or townland boundaries. Green infrastructure also plays a vital role in climate change mitigation and adaptation, by reducing CO_2 and absorbing water, and cooling the urban environment.

Blue infrastructure refers to waterways and waterbodies such as rivers, canals and the sea. Blue infrastructure refers to waterways and waterbodies such as rivers, canals and the Irish Sea.

Green and blue infrastructure plays an essential role in creating a more healthy and liveable city. These natural assets provide a platform for community activities, social interaction, recreation and physical activity, providing sustainable drainage solutions, facilitating biodiversity and wildlife habitats, carbon capture and creating connectivity.

6.2.5.1 Fingal's Existing Green and Blue Infrastructure

Fingal has many areas of high-quality landscape especially along the coast, the river valleys and the upland area to the north along the border with County Meath. Fingal green and blue network / systems are:

- Fingal ecological networks including:
  - Core Biodiversity Conservation Areas: Ramsar sites, Natura 2000 sites (Special Areas of Conservation (SAC) and Special Protection Areas (SPAs)), Natural Heritage Areas (NHA), proposed Natural Heritage Areas (pNHA), Statutory Nature Reserves, Refuges for Fauna, Annex I habitats outside designated sites, habitats of protected or rare flora.
  - Ecological Buffer Zones.
  - Nature Development Areas.
  - Designated Shellfish Waters.
- Watercourses including rivers and streams.
- Riverine floodplains.
- Coastal areas.
- Woodlands or forestry.

- Lands zoned open space and / or in use as public open space, cemeteries, demesnes, as well some privately-owned green spaces.

The streets in urban centres are also an important component of the county's green infrastructure network.

6.2.6 European Sites

Fingal (including adjacent Plan areas), include a number of areas designated for protection under the EU Habitats Directive (92/43/EEC) which form part of a European network of important ecological sites known as the Natura 2000 Network. These include Special Areas of Conservation (SACs), which are legally protected under the EU Habitats Directive (92/43/EEC) and are selected for the conservation of Annex I habitats and Annex II species, and Special Protection Areas (SPAs), which are protected under the European Union Directive on the Conservation of Wild Birds 2009/147/EC. In Ireland, SACs and SPAs are known as European sites.

There are 13 no. European sites within the administrative boundary of Fingal County. All European sites (i.e. SAC and SPA) located within Fingal County are listed in **Table 6.1**, as well as any European sites within 15km of the Plan area are considered, particularly where ecological links (source-pathway-receptors) exist between the area of the Plan and other European sites. Refer to **Figure 6.1.**

Table 6.1 European Sites located in and within a 15km buffer of the Plan Area[18]

European Sites in County Fingal			
Site Code	Special Areas of Conservation	Site Code	Special Protection Areas
000208	Rogerstown Estuary SAC	004015	Rogerstown Estuary SPA
000205	Malahide Estuary SAC	004025	Malahide Estuary SPA
000199	Baldoyle Bay SAC	004016	Baldoyle Bay SPA
000202	Howth Head SAC	004113	Howth Head Coast SPA
000204	Lambay Island SAC	004069	Lambay Island SPA
002193	Ireland's Eye SAC	004117	Ireland's Eye SPA
		004236	North-West Irish Sea SPA
European Sites within a zone of influence (15km) of the County Boundary			
Site Code	Special Areas of Conservation	Site Code	Special Protection Areas
003000	Rockabill to Dalkey Island SAC	004122	Skerries Islands SPA
000206	North Dublin Bay SAC	004158	River Nanny Estuary and Shore SPA
000210	South Dublin Bay SAC	004006	North Bull Island SPA
001209	Glenasmole Valley SAC	004024	South Dublin Bay & River Tolka Estuary SPA

[18] EPA AA Maps (2025).

European Sites in County Fingal			
Site Code	Special Areas of Conservation	Site Code	Special Protection Areas
002122	Wicklow Mountains SAC	004014	Rockabill SPA
002299	River Boyne & River Blackwater SAC	004040	Wicklow Mountains SPA
001957	Boyne Coast And Estuary SAC	004232	River Boyne & River Blackwater SPA
001398	Rye Water Valley/Carton SAC	004080	Boyne Estuary SPA

Conservation objectives for SACs and SPAs have been set for the habitats and species for which the sites have been selected. Site specific detailed conservation objectives are available on the NPWS website[19]. Any potential for adverse effects on European sites will be fully addressed in the Natura Impact Report (NIR) that will accompany the Draft Variation and will be on public display.

6.2.7 Natural Heritage Areas and Proposed Natural Heritage Areas

Nationally Designated Sites include Natural Heritage Areas (NHAs) which are legally protected areas that are considered important for their habitats or which holds species of plants and animals whose habitat needs protection, including geological/geomorphological sites in need of protection through NHA designation. While not statutorily designated proposed Natural Heritage Areas (pNHAs) are also of significance for wildlife and habitats. This network of NHAs and pNHAs provides supporting or stepping stone functions to the SAC and SPA network, in particular for species that move outside of SAC and SPA boundaries.

Under the Wildlife Amendment Act (2000) NHAs are legally protected from damage from the date they are formally proposed for designation[20]. The designation of these sites is the responsibility of the National Parks and Wildlife Service (NPWS). Further protection can be afforded to these areas by including appropriate protective measures in the Plan. **Table 6.2** lists the NHAs and the pNHAs within Fingal and those adjacent to the Plan boundary.

Table 6.2 pNHAs in the vicinity of the Variation Area[21]

Proposed Natural Heritage Areas in the vicinity of the Variation Area		
Site Code	Natural Heritage Areas	Distance from the Draft Variation
001218	Skerries Islands NHA	Adjacent to the Variation boundary
Site Code	Proposed Natural Heritage Areas	Distance from the Draft Variation
001203	Knock Lake	Within the Variation boundary
001204	Bog of the Ring	Within the Variation boundary
002000	Loughshinny Coast	Within the Variation boundary
000208	Rogerstown Estuary	Within the Variation boundary
000205	Portraine Shore	Within the Variation boundary

[19] NPWS (2025).
[20] NPWS (2019). *Protected Sites*.
[21] only those which don't overlap with European sites are listed

Proposed Natural Heritage Areas in the vicinity of the Variation Area		
Site Code	Natural Heritage Areas	Distance from the Draft Variation
000205	Malahide Estuary	Within the Variation boundary
000204	Lambay Island	Within the Variation boundary
001208	Feltrim Hill	Within the Variation boundary
001763	Sluice River Marsh	Within the Variation boundary
000178	Santry Demesne	Within the Variation boundary
000199	Baldoyle Bay	Within the Variation boundary
000203	Ireland's Eye	Within the Variation boundary
000202	Howth Head	Within the Variation boundary
000128	Liffey Valley	Within the Variation boundary
000206	North Dublin Bay	Adjacent to the Variation boundary
002103	Royal Canal	Within 15km of the Variation boundary
001398	Rye Water Valley / Carton	Within 15km of the Variation boundary
000554	Laytown Dunes / Nanny Estuary	Within 15km of the Variation boundary
002104	Grand Canal	Within 15km of the Variation boundary
0002070	Rockabill Island	Within 15km of the Variation boundary

6.2.8 CORINE Land Cover Mapping

The CORINE land cover mapping (2018) for Fingal County clearly indicates a clear breakdown between urban areas along the coast and to the southwest of the county heading into Dublin City. Agricultural land cover makes up the majority of the county, with some mixed forest cover to the south, refer to Figure 6.2.

The most common land covers within the Plan area are classified as *arable land, agricultural areas / pastures* for the majority of the county and *urban fabric / discontinuous urban fabric, Industrial, commercial and transport units* at urban areas. *Marine waters / estuaries, wetlands / intertidal flats,* along coastal zones.

Refer to Section 5.4.3 of this report for baseline information on land use – agriculture, forestry and woodlands.

6.2.9 UNESCO Biosphere Reserve

In 1981, UNESCO recognised the importance of Dublin Bay by designating North Bull Island as a Biosphere because of its rare and internationally important habitats and species of wildlife. In 2015 the designation was extended to the wider Dublin Bay reflecting the Bay's significant environmental, economic, cultural and tourism importance.

The Biosphere which now covers Dublin Bay, reflects its significant environmental, economic, cultural and tourism importance, and extends to over 300km². Over 300,000 people live within the newly enlarged Biosphere. It is the world's only Biosphere to include substantial areas of a capital city.

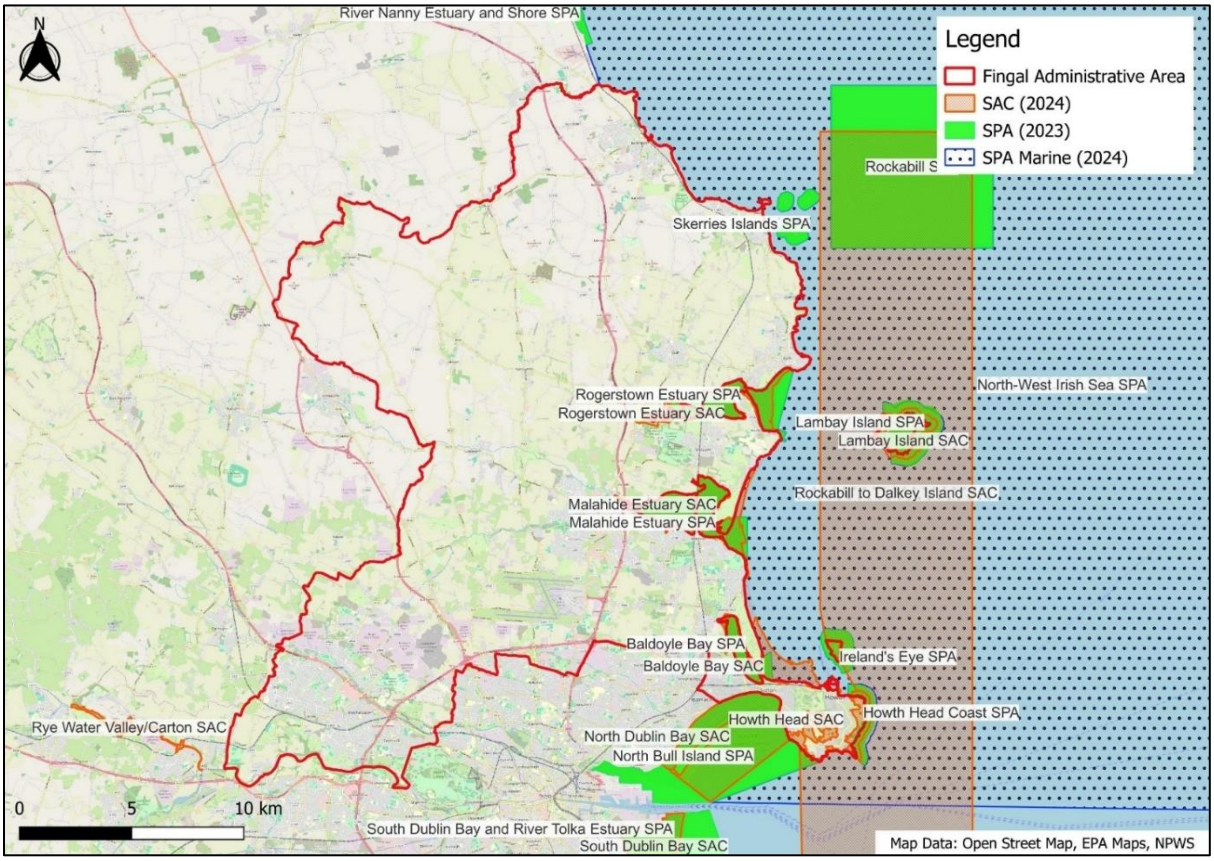
The Biosphere designation itself brings no new regulations; its aims are achieved by people working together within the existing national and international legislative framework. All Biospheres have three goals:

- **Conservation:** promoting the protection of landscapes, habitats, wildlife and cultural values
- **Learning**: supporting education and research, for a better understanding of nature and global issues
- **Development**: fostering a sustainable economy and society for people living and working in the area.

The Biosphere is divided into three distinct zones, which are managed in different ways:

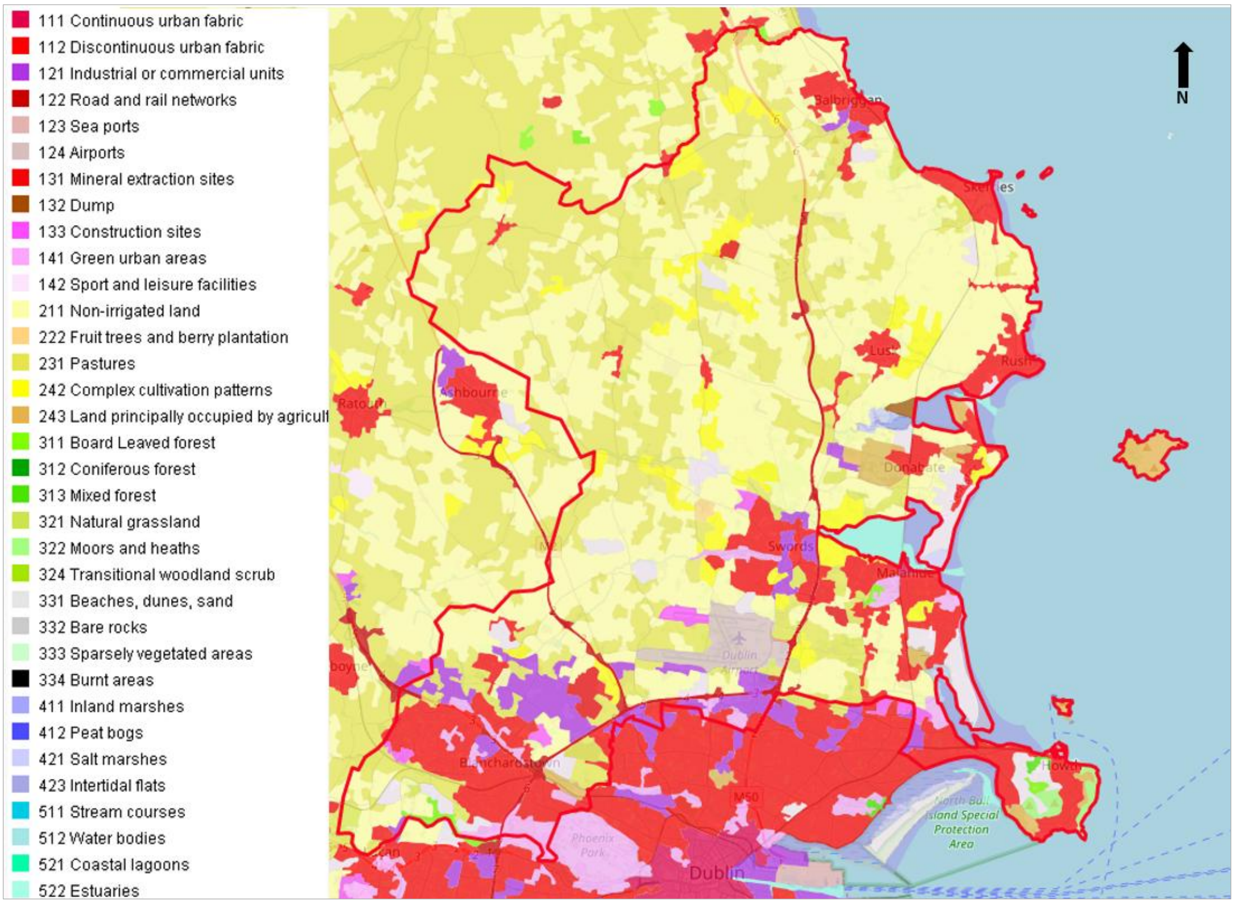
- **Core Zone:** This consists of protected areas, which are managed for the conservation of landscapes and biodiversity. It includes the Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) at North Bull Island, the Tolka Estuary, North Dublin Bay and South Dublin Bay, among others.
- **Buffer Zone**: This surrounds the core and comprises 82km² of public and private green spaces such as parks, greenbelts and golf courses, which surround and adjoin the core zones.
- **Transition Zone:** This zone comprises 173km² and forms the outer part of the Biosphere. It includes residential areas, harbours, ports and industrial and commercial areas. Dublin Port Company, is a member of the Dublin Bay Biosphere Partnership and it maintains pontoons within the port to providing nesting spaces for Common and Arctic terns, which are protected species under the EU Birds Directive.

Figure 6.1 European Sites within the Plan [22]



[22] NPWS (2025)

Figure 6.2 CORINE Land Cover 2018[23]



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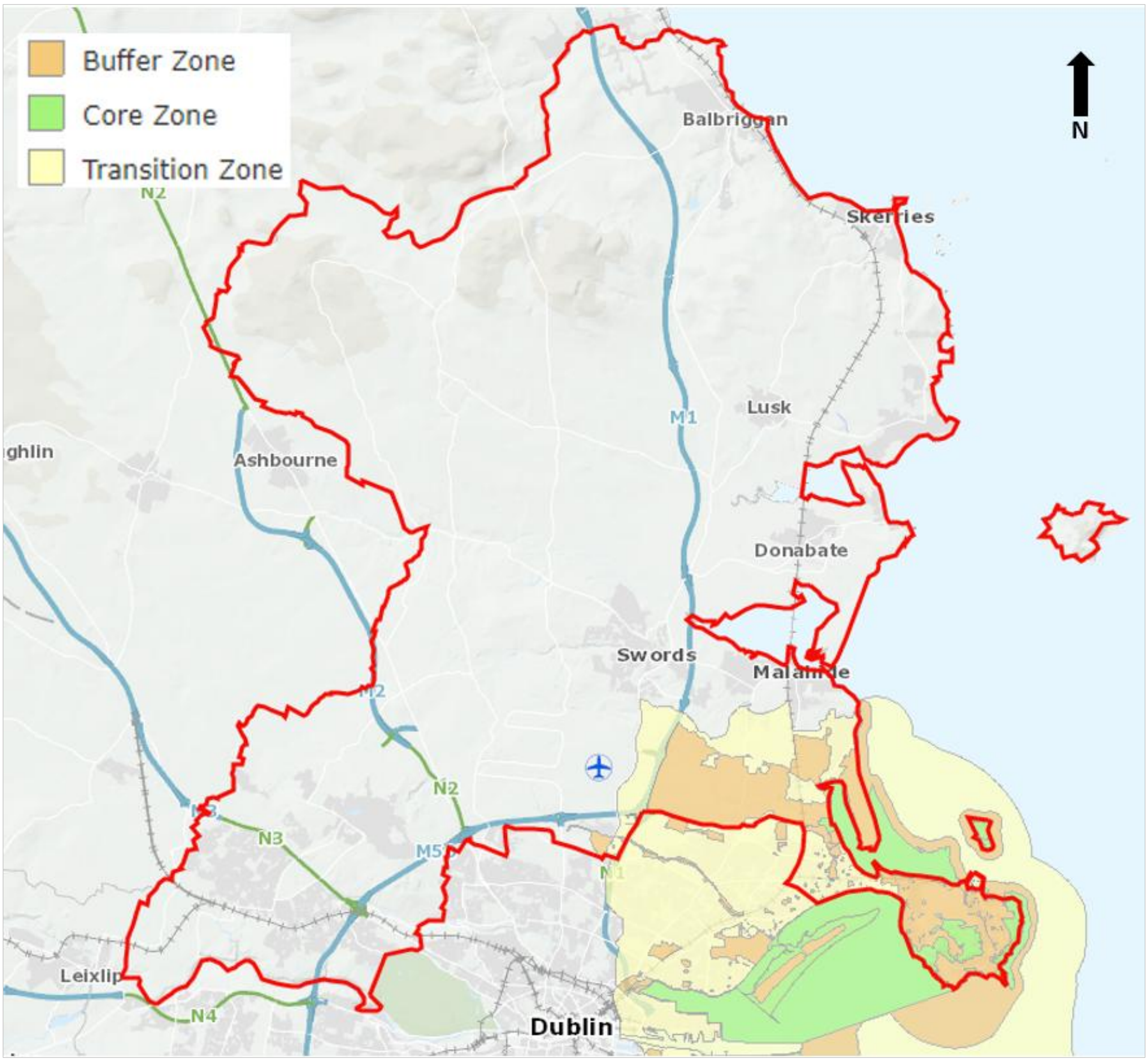
23 EPA Maps (2025). *Source OpenStreet Maps*.

Figure 6.3 Dublin Bay UNESCO Biosphere[24]



6.2.10 WFD Register of Protected Areas

Under the requirements of the Water Framework Directive (WFD) a number of waterbodies (or parts of) must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (RPAs). This register is split into five categories as outlined by the EPA:

- Areas designated for the abstraction of water intended for human consumption under Article 7;
- Areas designated for the protection of economically significant aquatic species (i.e. shellfish);
- Bodies of water designated as recreational waters, including areas designated as bathing waters under Directive 76/160/EEC;
- Nutrient-sensitive areas, including areas designated as vulnerable zones under Directive 91/676/EEC and areas designated as sensitive areas under Directive 91/271/EEC; and

[24] GEOHIVE Environmental Sensitivity Mapping (2025).

- Areas designated for the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection, including relevant European sites (Natura 2000) designated under Directive 92/43/EEC and Directive 79/409/EEC.

A number of these protected areas are present within Fingal and these are:

- The entire ground waterbody beneath the county is included on the Drinking Water - Ground Waterbody.
- WFD RPA Nutrient Sensitive Areas (Lake, Coastal & Transitional waterbodies) - Broadmeadow Estuary (Inner).
- WFD RPA Nutrient Sensitive Areas (Rivers) - River Liffey.
- WFD RPA Recreational Waters - Balbriggan, Front Strand Beach; Skerries, South Beach; Loughshinny Beach; Rush, North Beach; Rush, South Beach; Portrane, the Brook Beach; Donabate, Balcarrick Beach; Portmarnock, Velvet Strand Beach; Sutton, Burrow Beach; Claremont Beach.
- WFD RPA Shellfish Areas - Malahide Shellfish Area and Balbriggan \ Skerries Shellfish Area.
- WFD RPA Rivers in SAC Habitats - Palmerstown, Ballough, Ballyboghil, Turvey, Gaybrook, Howth.
- WFD RPA Water Dependent Habitats (SAC) - Rogerstown Estuary SAC, Malahide Estuary SAC, Baldoyle Bay SAC, North Dublin Bay SAC, Rockabill to Dalkey Island SAC, Lambay Island SAC.
- WFD RPA Water Dependent Habitats (SPA) - Rogerstown Estuary SPA, Malahide Estuary SPA, Baldoyle Bay SPA and North Bull Island SPA.

6.2.11 Designated Shellfish Waters

The EU Shellfish Waters Directive (2006/113/EC) aims to protect and improve shellfish waters in order to support shellfish life and growth.

Pollution reduction programmes are in operation for these areas. The identified pressures on these designated waters include urban wastewater systems, on-site wastewater treatment systems and port activities. The coastal waters provide an important resource, supporting and generating employment and recreational activities and must be protected.

There are two areas (Malahide and Balbriggan / Skerries) off the Fingal coast designated as Shellfish Waters pursuant to the *Shellfish Directive* and Section 6 of the *Quality of Shellfish Waters Regulations (S.I. No. 268 of 2006)* require the development of Pollution Reduction Programmes (PRPs) for designated shellfish areas in order to support shellfish life and growth and to contribute to the high quality of directly edible shellfish products. Shellfish PRPs relate to bivalve and gastropod molluscs, including oysters, mussels, cockles, scallops and clams. They do not cover shellfish crustaceans such as crabs, crayfish and lobsters.

6.2.12 Salmonid Waters

The Salmonid Regulations (S.I. No. 293 of 1988) designate the waters capable of supporting salmon (Salmo *salar*), trout (*Salmo trutta*), char *(Salvelinus*) and whitefish (*Coregonu*s) as protected. Thirty-four rivers, tributaries and lakes are listed and protected under these Regulations that prescribe quality standards for salmonid waters, sampling programmes and methods of analysis and inspection to be used by local authorities to determine compliance with the standards.

There are no designated salmonid rivers in Fingal, however salmonids are present in the Tolka and Ward Rivers.

6.2.13 Coastal Habitats

Coastal areas are home to coastal communities and settlements and seascapes of intrinsic natural amenity value and a diverse range of coastal habitats, some of which are of international and national importance protected by conservation designations.

Coastal habitats and features such as wetlands and vegetated dunes play an important role in flood relief, in protecting from coastal erosion and are important in their own right. Such features, habitats and species can be damaged or disturbed by tourism development and associated activity.

Beaches are home to an array of coastal habitats, for example, sand dunes which also act as a natural coastal defence. Human activities, such as walking routes and weather events can interfere with the stability and regeneration of sand dunes. It is therefore important that beaches and sand dunes are protected and well managed.

Coastal squeeze describes the impact on coastal habitats from the combined pressures of climate change at sea and human activities on land.

Fingal comprises 88km of scenic coastline, which stretches from Howth Head up to Balbriggan. The Fingal coastline contains many sensitive ecosystems, ranging from sand dune systems to estuaries rich in marine and bird life. The importance of the coast is reflected in the number of protected areas of national and international importance including Baldoyle Bay, Malahide Estuary and Rogerstown Estuary which are sites of international importance for wintering ducks, geese and wading birds and their habitats.

6.2.14 Other Designations

6.2.14.1 RAMSAR Sites

The Convention on Wetlands, called the RAMSAR Convention, is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources[25]. RAMSAR sites are designated and protected under the Convention of Wetlands of International Importance, especially as water fowl habitat.

Wetlands are important ecosystems, which improve water quality, provide storm protection, flood mitigation, stabilise shorelines, maintain biodiversity, and provide natural products such as fish and shellfish. Ireland presently has 45 no. RAMSAR sites. This includes four sites in Fingal - Baldoyle Bay, Malahide Estuary, Rogerstown Estuary and North Bull Island in Dublin Bay.

6.2.14.2 Wildfowl Sanctuaries

Wildfowl sanctuaries are areas that have been excluded from the '*Open Season Order*' so that game birds can rest and feed undisturbed. There are 68 no. sanctuaries in the State[26]. Shooting of game birds is not allowed in these sanctuaries. Rogerstown Estuary (WFS-20) and North Bull Island Wildfowl Sanctuary (WFS-19) are located within or adjacent to the Plan area.

6.2.14.3 Nature Reserves

A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order (Wildlife Acts 1976 and 2000).

There are 78 no. Statutory Nature Reserves in Ireland. Most Nature Reserves are on State owned lands. Designation provides for strict protection of habitats and wildlife within Statutory Nature Reserves and

[25] Site: https://www.RAMSAR.org/
[26] NPWS (2021).

damaging activities can be legally prevented in them. There is an obligation on local authorities to take all practicable steps to avoid or minimise any possible damage to Nature Reserves.

Rogerstown Estuary Nature Reserve, Baldoyle Estuary Nature Reserve and North Bull Island Nature Reserve area located within or adjacent to the Plan area.

6.2.14.4 Flora Protection Order

The making of a Flora Protection Order under the Wildlife Act provides protection for nationally important sites for protected plants. North Bull Island is listed for lesser centaury, hemp nettle and meadow saxifrage. The Royal Canal is listed for opposite-leaved Pondweed.

6.2.14.5 Special Amenity Area Order

Fingal has two Special Amenity Area Orders (SAAO):

- Howth Special Amenity Area Order.
- Liffey Valley Special Amenity Area Order.

The **Howth Special Amenity Area Order** (SAAO) protects many of the special qualities of the area and aims to preserve and enhance the character and special features of Howth. It covers a total of c. 545ha, including Ireland's Eye and the heathland, woods, cliffs, shingle beaches and wooded residential areas of the south-eastern half of the Howth peninsula. These areas have a rich diversity of flora and fauna and include protected species such as the green-winged orchid, the red squirrel and seabirds such as kittiwakes, guillemots and gannets. The order also designates a 21km network of public footpaths.

The **Liffey Valley Special Amenity Area Order** (SAAO), which is along the boundary of Fingal and South Dublin, was designated due to:

- Its outstanding natural beauty;
- The inclusion therein of areas which are of special recreational value, and
- The inclusion therein of areas which exhibit a need for nature conservation.

This section of the Liffey Valley, when considered as a whole, acts as a rural landscape feature and green belt. Mature tree stands, alluvial meadows, soft riverbanks with associated pastoral weirs, bridges, mill-races and large heritage houses combine to create a distinct river landscape.

6.2.14.6 Tree Preservation Order

A **Tree Preservation Order** (TPO) enables local authorities to preserve any single tree or group of trees and brings them under planning control. Tree preservation orders are only made if it appears that a tree or group of trees, need to be protected in the interests of amenity in the environment. The Planning and Development Act 2000 (as amended) has further outlined the legal framework and procedures provided in the 1963 Act to make a TPO. The existing TPOs within Fingal are as follows:

- The Vicarage, Church Road, Swords;
- Santry Demesne, Swords; and
- Brackenstown / Brazil, Swords.

6.2.14.7 Areas of Significant Amenity Value

Significant portions of the coastline, and a number of islands in Fingal, are visually sensitive as evidenced by the many protected views and prospects, high amenity zonings and areas of exceptional landscape value which are highly sensitive to development. Refer to Section 5.8.3.1.

6.2.15 Invasive Species

Invasive species constitute a threat to biodiversity and ecosystems and can have economic costs. In Ireland, there are currently 377 no. recorded non-native species and 342 no. non-native '*potential Invaders*', 66% are considered to have a low impact risk, 21% to have a medium impact risk and 13% have a high impact risk. The majority of invasive species in Ireland are plants, however, there is potential for rising trends of invasive vertebrate and invertebrate species[27].

Invasive alien species can negatively impact on native species, transform habitats and threaten whole ecosystems causing serious problems to the environment and the economy. They may in certain cases pose a threat to human safety. There is potential for the spread of invasive species during excavation and construction works.

Landowners are responsible for preventing the spread of Japanese Knotweed on their own land and vigilance is required by all landowners as invasive species can spread quickly across boundaries.

Invasive species have been and to some extent still are a significant challenge in Fingal. In Fingal, the problem with invasive species is mainly limited to alien plants species that grow in and along some of the woodlands, heathland and watercourses. Japanese Knotweed (*Reynoutria japonica*), Himalayan Balsam (*Impatiens glandulifera*) and Giant Hogweed (*Heracleum mantegazzianum*) are occasionally found along watercourses, completely taking over areas of the riverbank. Rhododendron ponticum and Cherry Laurel (*Prunus laurocerasus*) cast a dense shade in some of the heathlands and woodlands, preventing ground flora to grow and new tree saplings to emerge. Multi-annual control programmes are in place for Japanese Knotweed, Giant Hogweed and Himalyan Balsam. Various projects are also underway to control Rhododendron, Seabuckthorn, Cherry Laurel and garden invasives on the seacliffs on Howth.

6.2.16 Existing Biodiversity Issues

Ireland is currently experiencing a decline in floral and faunal populations. Implementation of measures to achieve the requirements of the Habitats Directive and the objectives of the Water Framework Directive (WFD) are likely to benefit protected sites in the future.

Developments and activities associated with urban developments, tourism and recreation, ports, coastal and fluvial flood defence schemes as well as a wide range of infrastructural works (including road works, water and wastewater disposal) that are located within, or close to, ecologically sensitive sites and species can give rise to significant environmental pressures.

Existing biodiversity issues / pressures and threats on Ireland's habitats and species, which are also relevant to the Fingal, include[28]:

- Development - construction and use of residential, commercial, industrial and recreational infrastructure and areas (For example development on greenfield sites, the construction and development of the road network and changes in farming practices).
- Transport systems - development / operation of the transport systems (For example the construction and development of the road network and light and noise pollution).
- Energy and infrastructure development - (For example construction of roads, gas, power, water and wastewater, also windfarms, etc.).
- Green Infrastructure - protecting the existing green infrastructure network from fragmentation and loss due to pressures of urban development within and adjoining the network.

[27] O'Flynn, C., Kelly,J. and Lysaght,L. (2014).
[28] DCHG (2019).

- Ecosystem Services - recognising and promoting the value of ecosystem services that blue and green infrastructure networks provides to the county.
- Climate Change - (For example the loss of wetlands, due to climate change events *i.e.* storms and flood events.).
- Human-induced changes in water regimes - contamination arising through poor working practices, leakages or accidental spillage of materials (For example wastewater treatment systems in the vicinity of significant waterbodies.).
- Mixed source pollution - (For example emissions from transport, heating homes, leachate from landfills, water pollution from wastewater treatment systems, eutrophication and acidification from forestry).
- Geological events, natural catastrophes - (For example flooding, storms / extreme weather events).
- Agriculture - (For example intensive agricultural practices, use of fertiliser and pesticides, hedgerow removal and lack of hedgerow management, overgrazing, under grazing).
- Coastal development - coastal erosion is an inevitable and necessary element of any healthy functioning beach and sand dune system. Coastal development and resultant shoreline defences can pose a significant risk to the entire beach due to wave reflection and scouring.
- Coastal - increased pressure on dune systems in coastal areas of the county - mainly from amenity and recreation activity and associated access, but also overgrazing.
- Awareness - increasing awareness of biodiversity through enhanced interpretation on-site and through visitor facilities.
- Land Management - conversion of land / sites and sealing of soils can release CO_2 into the atmosphere and further reduce areas of ‘carbon sinks’.
- Wetlands - infilling of wetlands, drainage works.
- Invasive Species and problematic species - continued control and management of invasive species. (For example the loss of biodiversity as native species are shaded out, but also diseases and pathogens).

6.3 Population and Human Health

6.3.1 Population

The National Planning Framework (NPF, revised April 2025) states that in the period between 2022 and 2040 it is expected that there will be roughly an extra one million people living in the country. There is an ongoing shift in population and jobs towards the east and to counties around Dublin in particular. The purpose of the National Planning Framework is to enable all parts of Ireland, whether rural or urban, to successfully accommodate growth and change, by facilitating a shift towards Ireland’s regions and cities, while also recognising Dublin’s ongoing key role as a capital city and an international city of scale.

The Dublin City and immediately adjoining suburban area should therefore plan to grow at a targeted rate of just above the projected national average to 2040, i.e. by around 20% to 25%. Given Dublin’s scale, this means planning for at least 296,000 more people in the City and suburbs by 2040, in addition to new sustainable communities at brownfield and greenfield locations along planned high-capacity public transport corridors in the post-2030 period.

The provision of additional housing over the Draft Variation of the Plan period will be dictated by the Core Strategy that guides where new development should be allocated in accordance with national and regional strategies and policies, including the NPF and the Regional Spatial and Economic Strategy (RSES) for Eastern and Midland Region.

The CSO provides data on population and socio-economic aspects of the population at different levels from the State, county level, Local Electoral Area (LEA), individual Electoral Districts (ED) to Small Areas (SA) within each County. The 2016 Census undertaken by CSO provides detailed results and reports. Most recent census was undertaken in April 2022. CSO published preliminary results for 'Census of Population 2022' on 23 June 2022 (updated September 2022) which have been superseded by the main results published from May 2023 onwards. A series of themed reports, Small Area Population Statistics (SAPS) and Place of Work, School, College - Census of Anonymised Records (POWSCAR) and their detailed statistical tables have been provided as per the schedule set by CSO for May 2023 to December 2023. This chapter uses the most up to date and detailed statistical data that is available at the time of writing this report.

The rate of growth has increased from 3.8 % to 8.1% as compared to the previous census, with the largest inward migration to Dublin. The economy has recovered since the last census with consequent population growth predominantly attributed to natural increase, greater economic activity, increased job opportunities and continued immigration. The summary results for 2022 census states that Fingal is one of the highest growing counties with a population increase of 11.6% between Census 2016 and Census 2022.

The distribution of population varied across Fingal with the highest population per Electoral Division (ED) concentrated along the outskirts of Dublin City (particularly in the western areas of Blanchardstown and Castleknock) and along the eastern cost (population is relatively evenly distributed from Howth up to Balbriggan). Naturally, there were urban clusters of higher population such as Blanchardstown, Balbriggan and Swords whilst the northwest of Fingal was the least populated area and indicative of the rural transition from north county Dublin towards Louth and Meath.

Population trends will be taken into account as part of Variation and will be influenced by the policies of both the NPF and the RSES.

Population density measures the number of persons occupying a geographical area in proportion to the size of that area. In Census 2022, the population density of the State was 73 people per km^2. **Figure 6.4** below indicates the population density per square kilometre (km^2) within the study area.

Figure 6.4 Population Density (persons per sq km) within County Fingal[29]

6.3.1.1 Socio-Economic Trends

Population structure and Age profiles

The age structure of a population is influenced by patterns of natural increase and migration. The age dependency ratio is the proportion of population in the young (0-14 years) and old (65 years and above) cohorts to the working population cohort (15-64 years). The age structure of the population of County Fingal reflects the future housing requirements, school requirements and community services.

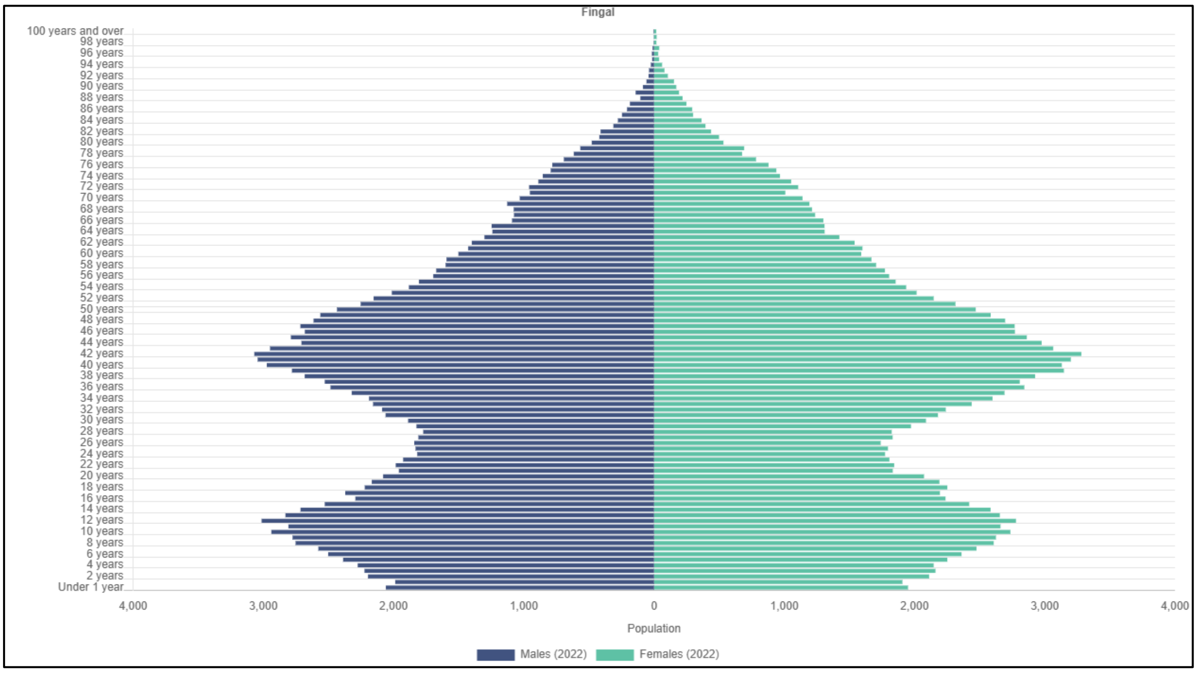
The age structure of the population indicates that the County in 2022 has a relatively young and working population (42 years and 12 years in 2022) and corresponds to that of the State (41 years). Refer to **Figure 6.5** below.

At 50.3% in 2022, Fingal had a lower than average age dependency rate (the proportion of the population under 15 years of age or over 64 years of age relative to the total population). The rate had dropped slightly compared to 2016, and was favourable compared to the 2022 national average (53.2%).

The increased numbers in the young population (0-14 years) reflects a more immediate requirements for additional childcare and schools for the younger population. The slight increase in the older populations (65 years and above) will also have long-term implications relating to healthcare, social services and transport.

[29] CSO Census 2022: https://www.cso.ie/en/releasesandpublications/ep/p-cpp1/censusofpopulation2022profile1-populationdistributionandmovements/populationdistribution/

Figure 6.5 Population by age distribution for County Fingal 2022[30]



6.3.1.2 Housing

The Planning and Development Act (PDA) places a statutory obligation on planning authorities to ensure that an adequate housing supply and sufficient lands for residential development are provided through the course of the County Development Plan. According to the 2022 Census, the number of private households in Fingal reached 107,846, an increase of 11.4% from 2016. Growth was higher than the national average rate over the period (+8.2%).

Of the private households in Fingal, 17,099 (15.9%) were single person households, compared to 15,257 in 2016. Such households account for a larger proportion of all households nationally, at 23.1%. Average household size in Fingal in 2022 was 3.02 persons. This was stable in the period from 2016, having increased from 2.9 in 2011. By comparison, Dublin City had an average household size of 2.48 in 2022, while the national average was 2.74.

It is essential to promote and facilitate the development of sustainable communities in the County by managing the level of growth in each settlement to ensure future growth is in accordance with the Core Strategy and County Settlement Hierarchy in order to deliver compact urban areas and sustainable rural communities. Placemaking, compact growth, active land management, and addressing the impact of climate change are some of the key themes of the growth strategy in both the National Planning Framework and Regional Spatial and Economic Strategy.

6.3.1.3 Employment & Economy

In Fingal, 27% of the population were within the socio-economic group of 'professional workers' in 2022 (employers, higher professional and lower professional). This was the highest in the country with only Dún Laoghaire-Rathdown and Kildare featuring higher proportions of such workers. Nationally, 22.6% of the population were professional workers.

[30] Census 2022 Population by age - https://www.cso.ie/en/releasesandpublications/ep/p-cpp1/censusofpopulation2022profile1-populationdistributionandmovements/populationdistribution/

In 2022, Fingal had a working-age population (those aged 15 and over) of 256,458. Of these, 60.5% or 155,063 were in employment, which compares favourably to the national average of 56.1%. Fingal had the highest proportion of residents in employment in Ireland, with Dublin City ranking second at 59.6%. This is a reflection of the strengthening labour market across the Capital and nationally, where unemployment has fallen to historic lows.

The unemployment rate in Fingal equalled the national average of 5.1% in 2022, having declined from 7.9% in 2016.

6.3.2 Human Health

Human health has the potential to be impacted upon by environmental factors such as air, water or soil through which contaminants could accumulate and have potential to cause harm through contact with human beings. Hazards or nuisances to human health can arise due to exposure to these vectors, for example arising from incompatible adjacent land uses. The impact of development on human health is also influenced by the extent to which new development is accompanied by appropriate infrastructure and the maintenance of the quality of water, air and soil. It is also appreciated that new development or environmental change can elevated stress and effect mental health of local populations.

There are strong links between income and health, as it is recognised that the sustainability of current and future economic activity is an important element in protecting and promoting population health and in reducing poverty and deprivation. However, emphasising economic growth without due regard for social and environmental consequences of such growth can have negative impacts on health both for the population as a whole and for groups within the population.

Within areas of economic development, job creation does not necessarily 'trickle down' to job opportunities for the long-term unemployed. Therefore, economic development needs to be targeted, geographically and within population groups to ensure that it reduces and does not exacerbate social inequalities.

There needs to be particular attention to the environmental issues and sustainability endeavours to protect human health as the local economy develops. While employment is generally good for health, there can be negative impacts, usually related to the quality of the working environment and nature of work undertaken.

6.3.2.1 Infrastructure / Amenity and Human Health

Fingal has a diverse and interesting character ranging from both urban and rural areas to the coast and river valleys. The main urban centres include Blanchardstown, Swords, Balbriggan, Malahide, Portmarnock, Donabate, Baldoyle, Skerries, Sutton, Howth, Lusk and Rush. The remainder of the county is mainly rural in character and includes the villages of Ballyboghil, Oldtown, Rowlestown, Naul, Balrothery, Garristown and Loughshinney.

Fingal possesses a variety of significant recreational and tourist amenities and attractions, which are both land and water orientated. The coastal towns in Fingal provide opportunities for inshore and offshore water-based recreational activities including sailing, boating, windsurfing, scuba diving, swimming, powerboating, canoeing and rowing. Gardens and historic sites, such as Malahide Castle and Ardgillan and Newbridge Demesnes, remain popular day visitor attractions.

Also in Fingal, green and blue infrastructure alongside playgrounds and sports facilities provide residents, businesses and visitors with important social, physical and environmental benefits including promoting health and wellbeing for all age groups and abilities.

6.3.2.2 Radon and Human Health

The greatest health risk from radiation in Ireland is caused by radon. Radon is a radioactive gas, which is naturally produced in the ground from the uranium present in small quantities in all rocks and soils. Tiny radioactive particles are produced by the gas which when inhaled can cause lung cancer. The risk of contracting lung cancer as a result of Radon depends on how much Radon a person has been exposed to over a period of time.

The national reference level for homes in Ireland (above which remedial action should be taken) is 200 Becquerel per cubic metre (Bq/m^3); the typical level found in homes is 89Bq/m^3. High Radon Areas are defined where the EPA predicts that 10% or more homes have radon levels above 200Bq/m^3.

The EPA has identified an area in the northern part of the Fingal Development Plan area, to the west of Balbriggan, as being a High Radon Area, where predicted levels of radon are greater than 20% above the reference level. Significant concentrations of radon may occur within this area. Refer to **Figure 6.6**.

6.3.2.3 Dublin Airport

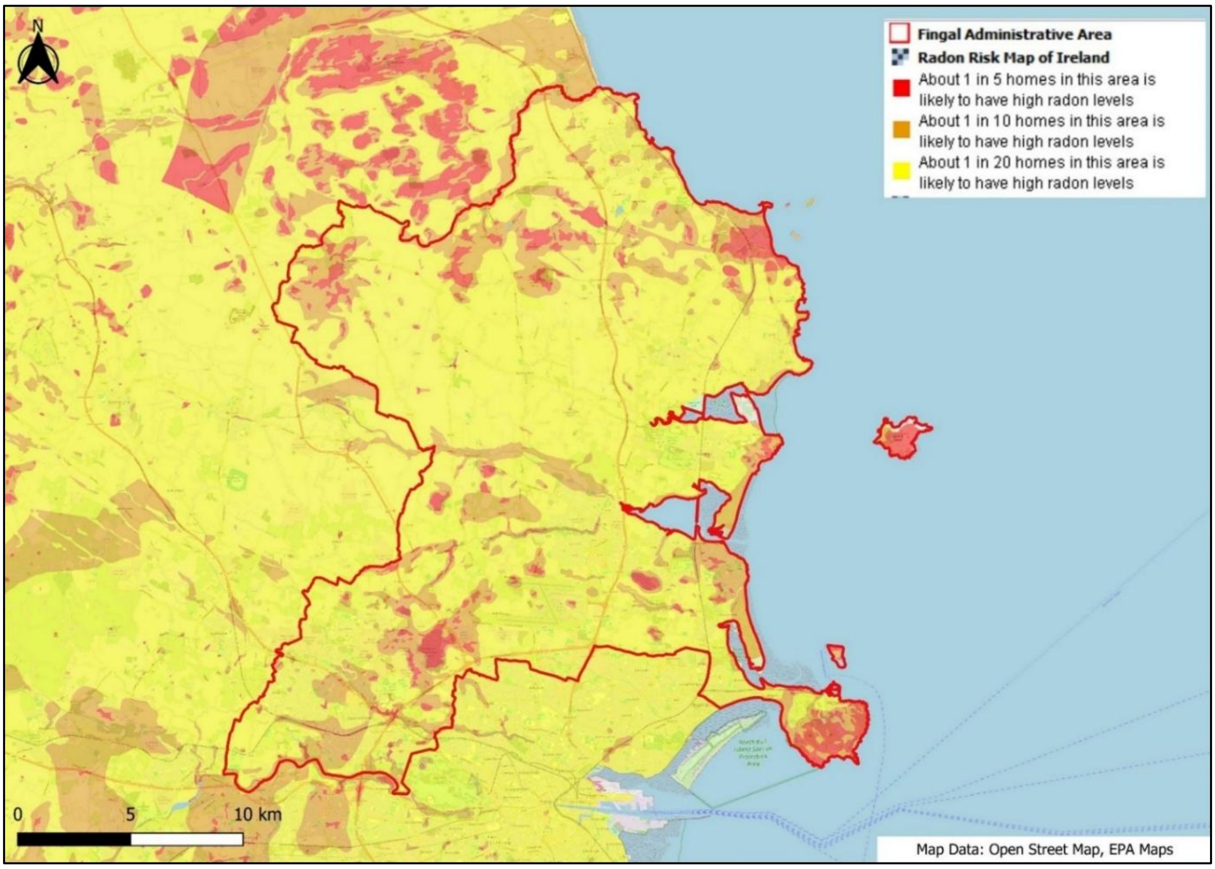
Dublin International Airport is located within Fingal and while being of national and strategic significance, it is also a significant source of noise for the county. Dublin Airport is located approximately 10km north of Dublin City centre. It consists of lands of over 1,000 ha.

Many people who live around an airport experience aircraft noise as a series of aircraft events which may potentially change over the course of a day or between days according to factors such as the airport's schedule, aircraft routing and the operating direction.

Noise can have a significant and disruptive effect on everyday life. Since the implementation of the Environmental Noise Regulations 2006 (the 'Regulations'), S.I. No. 140 of 2006, there have been extensive studies into the links between environmental noise exposure and health. These studies have considered transportation noise sources including road, rail and aircraft with responses being found to differ depending upon source. This work has resulted in organisations such as the European Environment Agency (EEA) and the World Health Organisation (WHO) developing guidelines and advice based on reviews and meta-analysis of the available research.

Noise Action Plan 2024-2028 has been prepared for Dublin Airport that provides an overview of the Regulations with a review of the results of the latest strategic noise maps for Dublin Airport and sets out an approach for the strategic management and control of environmental noise associated with aircraft activity at Dublin Airport over the period 2024 to 2028 having regard to the existing noise management framework.

Figure 6.6 Radon Levels in Fingal[31]



6.3.3 Existing Population and Human Health Issues

A focus on residential development in sustainable locations, accessible to public transport infrastructure utilising brownfield lands in our existing settlements is essential to deliver a reduction in emissions. Furthermore, provision of surface water and flood risk management measures throughout developments is essential to climate-proof any future developments.

Existing population and human health issues / pressures on the population of the Fingal administrative area, include:

- Population / Households - there is an increasing demand for housing units in the county.
- Health and Well-being - continue the development of recreation and leisure facilities
- Flooding - Fingal is vulnerable to fluvial, pluvial, tidal / coastal and groundwater flooding events which occur as a result of storm events, prolonged rainfall, high tides and land use changes, see Section 5.5.9 of this report).
- Radon - Radon levels in the Fingal have been collated from the Radiological Protection Institute of Ireland, refer to Figure 6.6.
- Access - the '*Access to and the use of Blue / Green Spaces in Ireland during a Pandemic*' study highlighted significant differences between socio-economic groups in relation to the amount of time spent outdoors in blue / green spaces during the pandemic with the lowest income group reporting the lowest average number of days.

[31] EPA Maps (2025). *Source OpenStreet Maps*.

- Climate Change - potential impacts of climate change on human health from changes to local weather, including prolonged periods of hot or cold weather - which can lead to heat and cold stresses and their associated effects.
- Airport / Noise - potential adverse impacts from noise levels associated with exposure to undesirable noise levels from aircraft / flight paths.
- Airport / Noise - health impacts include cardiovascular disease, effects on sleep / sleep patterns, cognitive Impairment, becoming or increasingly disturbed or bothered by noise, impacts on quality of life and mental health, hearing impairment and tinnitus.
- Information on the status of drinking water, wastewater climate change are provided in other sections of this report.

6.4 Land, Soils and Geology

6.4.1 Introduction

Land is the solid surface of the Earth that is not permanently covered by water, while soil is the ecosystem in the uppermost layer of the ground in which plants can grow. Soil is composed of mineral particles, organic matter, water, air and living organisms[32]. Land degradation is a global problem, often caused by a combination of factors such as poor land management and unsustainable development. Land degradation may exacerbate the impacts of natural disasters[33].

The upper most layer of the earth's surface is generally termed 'soil'. It comprises for the most part organic matter, minerals and fine to course grained weathered rocks. The variability in the constituent parts and the percentage content of each in the soil matrix results in differing characteristics. This has implications for suitable land use and the appropriateness for differing land use practices.

Geology encompasses the understanding and study of the solid and liquid matter that constitutes the earth and the processes by which they are formed, moved and changed. Its understanding is necessary to fully appreciate the geological factors that shape and influence the world and its particular structure.

6.4.2 Land

Agricultural land cover makes up the majority of the county, with some mixed forest cover to the south. Urban areas are found along the coast and to the southwest of the county heading into Dublin City.

6.4.2.1 Agriculture

Rural Fingal's rich agricultural land is home to well-developed agriculture industries and centres of local food production. Agricultural activity in Fingal includes tillage of cereals and other crops, pasture and dairy.

Fingal's ties to the agri-food sector plays a vital role in the local and national economy and clusters of horticulture and agri-food production is evident in the north of the county. These include Keelings, Country Crest, Sam Dennigan, Keogh's and Donnelly's.

Land use patterns from agriculture to uses for residential developments, business parks and light industry can result in the loss of hedgerow boundaries and alteration or culverting of stream channels. The loss of agricultural and soil resources close to the metropolitan area of Dublin also increases dependency on imported food produce with corresponding increased 'food miles' and higher carbon emissions.

[32] European Commission (2021).
[33] European Commission (2021).

6.4.2.2 Forestry and Woodlands

Woodlands, trees, and hedgerows, all offer opportunities for biodiversity protection, urban place enhancement, and mitigation for (and adaptation to) climate change. Forests and woodlands are a natural resource which can provide commercial, recreational, environmental, amenity and aesthetic benefits to the county. Forestry can provide a supplementary form of farm activity through planting maintenance and harvesting and can also provide a sustainable construction material and a source of renewable energy.

FCC manages approximately 2,000ha of public open space and many public parks in the county have significant stands of woodland framing important and often iconic landscapes. Tree canopy cover across Fingal, which has predominantly rural land cover (74%) is estimated at 6.5%. There are 70,000 Council owned / managed trees in Fingal Approximately 20% of the publicly owned open space within the county *i.e.* 400ha of land is occupied by woodland[34].

The revision of FCC's *Tree Strategy 'Forest of Fingal'*, is an indication of the Council's continued commitment to looking after one of its most important natural resources and assets, its trees[35].

6.4.3 Soils

Soil is a non-renewable resource that performs many vital functions: food, storage, filtration and transformation of many substances including water, carbon, and nitrogen. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance.

The Irish Soil Information System (SIS) concludes a 5 year programme, supported by the EPA and Teagasc, to develop a 1:250,000 scale national soil map[36]. The Irish Soil Information System adopted a unique methodology combining digital soil mapping techniques with traditional soil survey application.

The soil cover within Fingal is characterised by fine loamy drifts with limestones and siliceous stones. Clayey soils occur towards the north of Fingal. Urban / made ground is interspersed throughout the county, particularly along the coast and in the south of the county, reflecting settlement patterns. The coastal areas are by their nature characterised by the presence of rock outcroppings, beaches, sand dunes and tidal / marshy areas. Soils in the river valleys are comprised of riverine alluviums with marine alluviums deposited near the coast. Refer to Figure 6.5 for the SIS map for Fingal.

Information on subsoils is available from the EPA's Soil and Subsoil Mapping Project in conjunction with the Geological Survey, Ireland (GSI) and Teagasc. Much of the subsoil in Fingal, as shown in Figure 6.6, is derived from variable Carboniferous-age limestone parent material, present across the majority of the mid to southern parts of the county. The subsoils in the northern part of the county is predominantly derived from Namurian (mid- Carboniferous) age sandstone and shale tills, with subsoils in the far north of Fingal derived from Cambrian-Silurian (lower Palaeozoic) age sandstones and shales.

In some areas of the county, soil has been polluted and contaminated by development which has not followed good environmental practice and / or which has not been serviced by the appropriate infrastructure. There are a number of sites, such as old landfills which have adversely affected the adjoining soil resources.

[34] FCC (2023).
[35] FCC (2023).
[36] Available at: http://gis.teagasc.ie/soils/index.php

The potential for disturbance of soils during infrastructural development can lead to the loss of soils along with compaction of soils due to operations of heavy machinery. Loss of soils and sediment to water courses can lead to sediment issues such as an increase in suspended solids, which can impact on water quality. Human activity is also a significant driver of soil degradation through poor or inappropriate land management practices. Practicing sustainable land management and soil conservation principles needs to be at the heart of the planning process, which means shifting away from a reliance on zoning of greenfield lands towards more brownfield development opportunities in and around our major cities and towns[37.]

6.4.3.1 Contaminated Soils

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and biodiversity including habitats and species. There is potential for contamination at sites within Fingal, especially where land use (such as landfills and Seveso sites) occurred in the past in the absence of environmental protection legislation.

Due to a mixture of historic landfills and land reclamation, there are a number of locations in the county where contaminated land arises. Decontamination activities should ensure there is no off-site migration of contaminants via runoff, soils or groundwater and the area is available for use. Balleally landfill has been redeveloped as Rogerstown Park, which opened in 2019. The former Dunsink landfill, which is in an aftercare phase, will be developed as a regional park.

6.4.3.2 Extractive Industries

In planning for quarries, a balance must be sought between permitting extraction to meet economic demands and the prevention of undue harm to the environment and amenities. Extraction activity should not have adverse impacts on Natura 2000 sites and geological features of national and international importance. Likewise it is important that we don’t sterilise reserves by building where there are rare reserves.

Extractive industries by their nature can give rise to detrimental environmental and residential amenity effects including traffic generation, vibration, dust, noise, water pollution, visual intrusion and loss of groundwater supplies.

Quarrying has been historically undertaken throughout the county due to the presence of deep deposits of sand, gravel and bedrock. Fingals’ extractive industries (quaries) register) includes - Gormanstown Demesne, Bay Lane, Kilshane, Dublin 11, Milverton, Skerries, Co. Dublin, Hollywood Great, Naul, Co. Dublin, Feltrim Quarry, Swords, Co. Dublin, Huntstown Quarry, North Road, Finglas, Dublin 11, The Hollow, Windgate Road, Howth, Co. Dublin, Lecklinstown, Naul, Co. Dublin.

Guidelines for Planning Authorities on Quarries and Ancillary Activities published by the Department of the Environment, Heritage and Local Government (DEHLG) in 2004 and a number of other guidelines relating to quarrying have been produced by various bodies for example *‘Geological Heritage Guidelines for the Extractive Industry’*[38], ‘*Guidelines for the Preparation of Soils, Geology and Hydrogeology Chapters of Environmental Impact Statements’*[39] and ‘*Wildlife, Habitats and the Extractive Industry’*[40] to provide guidance on the management of extractive industries.

[37] EPA (2020g).
[38] GSI (2008).
[39] IGI (2013).
[40] DEHLG (2006).

6.4.3.3 Historic Landfills

Historic landfills have the potential to seriously pollute the environment through soil and groundwater contamination by the leachate. The leachates, in particular those generated by hazardous wastes, can migrate through the soil and reach ground or surface waters which could result in serious implications for the environment and human health. Gas emissions can also pose a risk to air quality and therefore human health and biodiversity.

There are a number of historic landfill sites, all classified as moderate to low risk, that have been identified in Fingal, these are:

- Barnageeragh, Skerries
- Curkeen Quarry, Ballykea
- St Doolagh's Quarries
- Burrow Road, Sutton
- Porterstown, Sutton
- Tolka River Park, Blanchardstown
- Castlemoate House
- Nevitt
- Belcamp Lane
- Fancourt.

6.4.3.4 Seveso Sites

The Seveso III Directive (European Directive 2012/18/EU) and the European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations, 2000 (S.I. No. 476 of 2000) apply to companies where dangerous substances are present in quantities equal to or above specified thresholds. There are two thresholds, a lower one of 50 tonnes ('lower tier sites') and a higher one of 200 tonnes ('upper tier sites'). Lower tier sites are required to have a Major Accidents Prevention Policy and a Safe Work Systems Plan. Upper tier sites are required to carry out, in conjunction with the local competent authority (which includes the Health Service Executive (HSE), the Local Authority and An Garda Síochána) a Major Accidents External Emergency Plan.

Emergency Plans must take full account of objectives established for nearby waters in river basin plans. The legislation deals with the prevention of major accidents. In the Fingal administrative area there are four Upper Tier sites and five Lower Tier sites41. The size of the safety buffer around each SEVESO plant depends on the nature and scale of activity on the site. Refer to **Table 6.3**.

Table 6.3 Seveso Sites in the Fingal Administrative Area

Upper Tier Seveso Sites	
Site Name	**Address**
Barclay Chemicals Manufacturing Ltd.	Damastown Way, Damastown Industrial Park, Mulhuddart, Dublin 15
Chemco Ireland Ltd.	Damastown Rise, Damastown Industrial Estate, Dublin 15
Contract & General Warehousing Ltd.	Westpoint Business Park, Navan Rd. Mulhuddart, Dublin 15
Guerbet Ireland ULC	Damastown Industrial Estate, Mulhuddart, Dublin 15

[41] HSA (2021).

Upper Tier Seveso Sites	
Lower Tier Seveso Sites	
Astellas Ireland Co. Ltd.	Damastown Road, Damastown Industrial Park, Mulhuddart, Dublin 15
Clarochem Ireland Ltd.	Damastown, Mulhuddart, Dublin 15
Exolum Aviation Ireland Ltd.	Fuel Farm Facility, Corballis Road South, Dublin Airport, Fingal, Co. Dublin
Gensys Power Ltd.	Huntstown Power Station, Huntstown Quarry, Finglas, Dublin 11
SK Biotek	Watery Lane, Swords, Co. Dublin

6.4.3.5 Landslides

Fingal has a low landslide risk as much of the county is low-lying ground. According to Geological Survey, Ireland *landslide susceptibility mapping*, the vast majority of the county has been rated as having *'low'* landslide susceptibility, with the risk rising to '*moderately low'* in isolated patches throughout the county. There are two recorded landslide within Fingal; these occurred in 1999 and 2016 in Diswellstown (Knockmaroon Glen Quarry) and Lucan (rear of the cement factory). Refer to Figure 6.7.

Figure 6.7 Soil Information System (SIS) National Soils Map for Fingal[42]

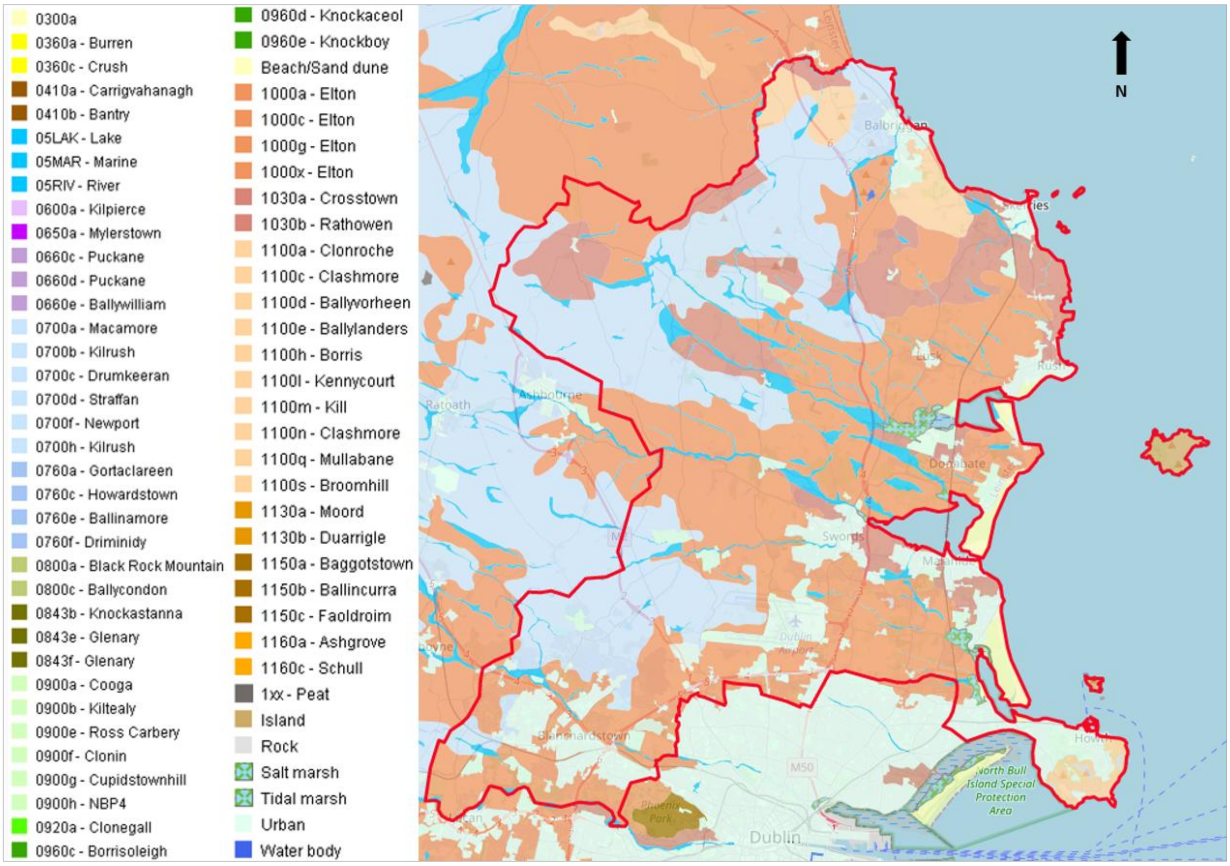
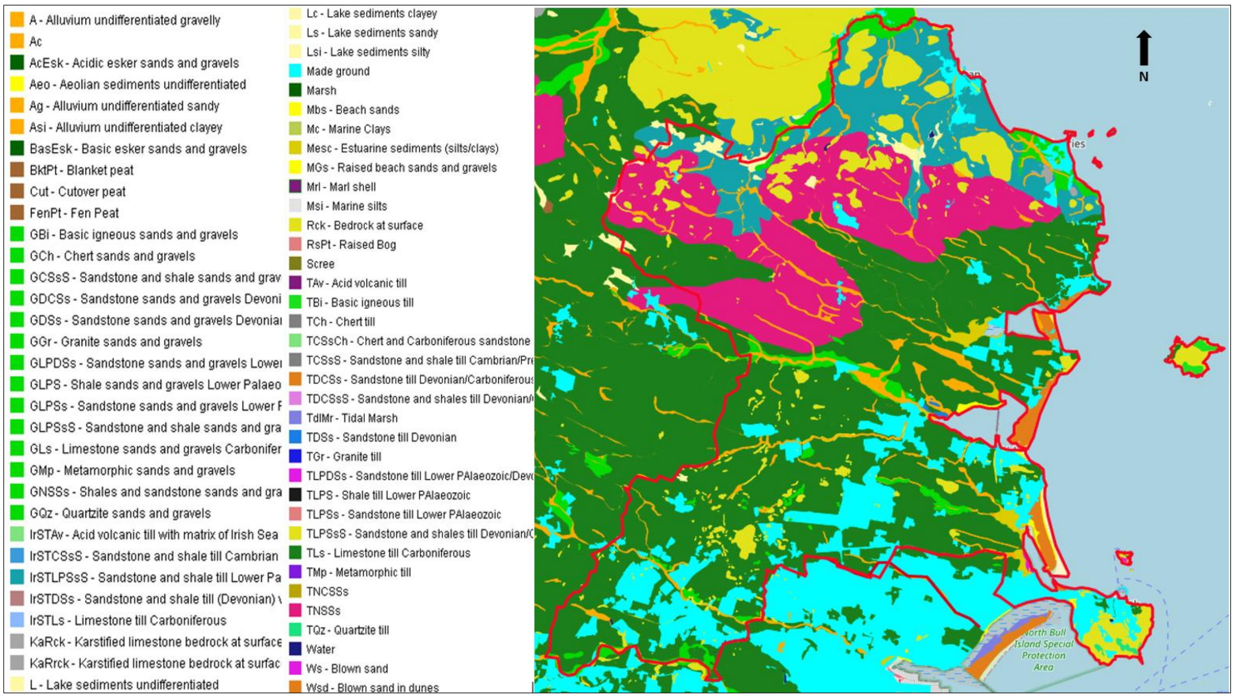
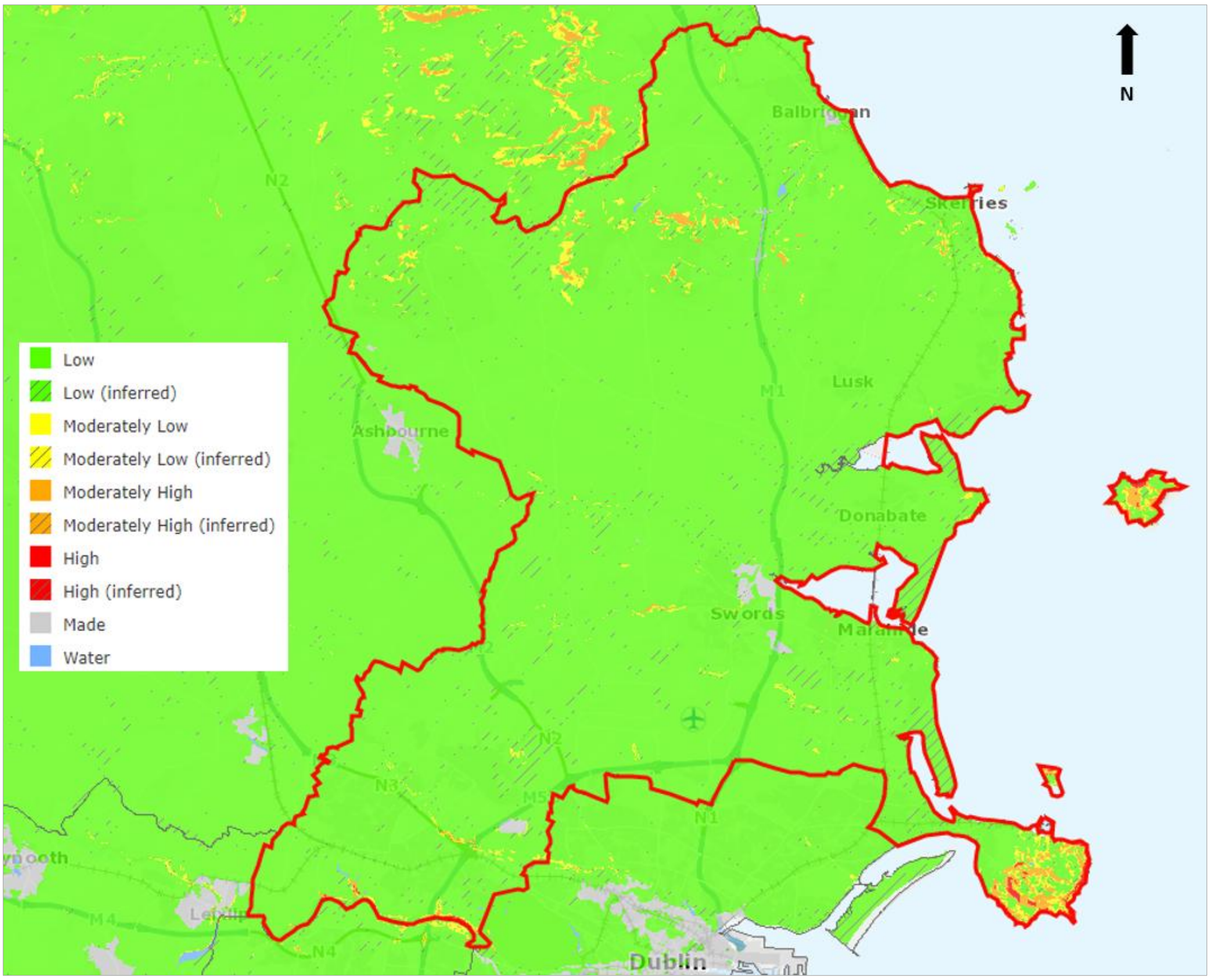


Figure 6.8 Teagasc Subsoils Map for Fingal[43]



42 GSI Maps (2025). *Source OpenStreet Maps*.
43 GSI Maps (2025). *Source OpenStreet Maps*.

Figure 6.9 GSI Landslide Susceptibility for Fingal[44]



6.4.4 Geology

The Geological Survey, Ireland (GSI) provides information available on bedrock, subsoil, aquifer classifications and vulnerability. Numerous natural factors influence the composition of soils, notably bedrock, climate and topography. Geological understanding and interpretation is best achieved on the ground at sites where rocks and landforms are displayed.

The oldest bedrock in Fingal is Cambrian (lower Palaeozoic) in age, and comprised of hard quartzites, forming the outcrops at Howth head and Ireland's Eye. Ordovician age volcanics along the east coast are related to a time of volcanic activity, with Lambay Island representing the remnants of an extinct volcano. The majority of the bedrock underlying the rest Fingal is comprised of various bedded and un-bedded limestone formations which were deposited during the early Carboniferous period, when the eastern part of Ireland underwent uplift and erosion. Subsequent subsidence over millions of years coupled which changing sea levels resulted in the deposit of shallow and then deeper marine sediments accumulating across much of the county. Much of the bedrock, especially on lower ground is covered by a layer of Quaternary-age sediments (2.6 million years ago to present) and much of this material is glacial till and alluvial in nature.

The Irish Geological Heritage (IGH) Programme is currently identifying and selecting the very best national sites for Natural Heritage Area (NHA) designation, to represent the country's geology. The IGH is also identifying

[44] GEOHIVE. *Environmental Sensitivity Mapping* (2025).

many sites of national or local geological heritage importance, which are classed as County Geological Sites (CGS), although these will not receive statutory protection of NHA sites. CGS do not receive statutory protection like Natural Heritage Areas (NHA) but receive an effective protection from their inclusion in the planning system. Some of these sites overlap with SACs and some are already pNHAs.

The Geological Heritage Audit of Fingal was completed in 2007, which identifies 21 no. geological sites of interest in the county. The list of County Geological Sites for Protection is set out in **Table 6.4** below.

Table 6.4 Geological Heritage Sites in Fingal [45]

No.	IGH[46] Theme	Site Name	Description
1	IGH 1, 2, 4, 7, 12 (Karst, Precambrian to Devonian Palaeontology, Cambrian-Silurian, Quaternary, Mesozoic and Cenozoic)	Portrane Shore	Coastal cliffs and foreshore. Ordovician volcanic lavas and associated debris flows, slumped limestones, palaeokarstic doline and Silurian sandstones. There is a very small exposure of earliest Carboniferous conglomerate.
2	IGH 2, 4 (Precambrian to Devonian Palaeontology, Cambrian - Silurian)	Fancourt Shore	Coastal cliffs and foreshore. Silurian slates and greywacke sandstones.
3	IGH 2, 4 (Precambrian to Devonian Palaeontology, Cambrian-Silurian)	Lambay Island	Entire island with extensive coastal cliffs and inland natural exposures of rock. Upper Ordovician andesite and associated volcanic rocks, with fossiliferous limestones at Kiln Point and shales at Heath Hill.
4	IGH 3, 8 (Carboniferous to Pliocene Palaeontology, Lower Carboniferous)	Curkeen Hill Quarry	Disused quarry used as a landfill site. Lower Carboniferous (Late Tournaisian to Lower Viséan) mudbank limestone.
5	IGH 8, 3 (Lower Carboniferous, Carboniferous to Pliocene Palaeontology)	Feltrim Quarry	A working quarry on Feltrim Hill. Lower Carboniferous (Waulsortian) limestone with shale from the Tober Colleen Formation.
6	IGH 3, 8 (Carboniferous to Pliocene Palaeontology, Lower Carboniferous)	Malahide Coast	Coastal Section. Lower Carboniferous limestone and shale of the Malahide Formation and Tober Colleen Formation.
7	IGH 3, 8 (Carboniferous to Pliocene Palaeontology, Lower Carboniferous)	Skerries to Rush	Coastal cliff and foreshore section. Lower Carboniferous (Visean) limestone, shale and conglomerate.
8	IGH 4 (Cambrian – Silurian)	Ardgillan House Boulder	Single large boulder placed beside path from public car park to Ardgillan House. Ordovician pillow lavas, weathered to show concentric patterns within pillows.
9	IGH 4, 7 (Cambrian-Silurian, Quaternary)	Bottle Quay	Coastal cliffs and foreshore section. Cambrian quartzite and mudstone of the Drumleck Formation with overlying Quaternary sediments.

[45] GSI (2007).
[46] Irish Geological Heritage Theme

No.	IGH[46] Theme	Site Name	Description
10	IGH 4, 12 (Cambrian-Silurian, Mesozoic and Cenozoic)	Hill of Howth	Valleys and rock outcrops on the Hill of Howth. Cambrian quartzite and mudstone mélange of the Drumleck Formation and polymict mélange of the Elsinore Formation.
11	IGH 4 (Cambrian-Silurian)	Ireland's Eye	Entire island with cliff sections and inland outcrop exposures. Cambrian greywacke, sandstone and quartzite of the Bray Group.
12	IGH 4 (Cambrian – Silurian)	Shenick's Island	Coastal exposures around an island. Ordovician andesite, tuffs, shales with an undated red breccia.
13	IGH 8 (Lower Carboniferous)	Balscadden Bay	Coastal cliffs within a small bay area. Lower Carboniferous limestone and Cambrian polymict mélange (an ill-assorted mixture of various fragmented rock types).
14	IGH 8 (Lower Carboniferous)	Claremont Strand	Coastal and foreshore section. Lower Carboniferous (Waulsortian) limestone.
15	IGH 8 (Lower Carboniferous)	Milverton Quarry	Working quarry. Lower Carboniferous (Viséan) limestone and shale of the Holmpatrick Formation.
16	IGH 8 (Lower Carboniferous)	Nags Head Quarry	Large working quarry. Lower Carboniferous (Viséan) limestone, shale and sandstone.
17	IGH 9 (Upper Carboniferous)	Balrickard Quarry	A disused quarry. Upper Carboniferous (Namurian) sandstone and shale of the Balrickard Formation.
18	IGH 9 (Upper Carboniferous and Permian)	Walshestown Stream Section	Rock exposures in the banks of a stream over a distance of 1.5km. Upper Carboniferous (Namurian) shale, sandstone and limestone of the Walshestown and Balrickard Formations.
19	IGH 11 (Igneous intrusions)	Rockabill	Two entire islands. Caledonian granite.
20	IGH 13 (Coastal Geomorphology)	Malahide Point	Dunes and a sand / shingle spit. Recent geomorphological landforms.
21	IGH 16 (Hydrogeology)	Mulhuddart Well	Cold spring. The water is presumably derived from either shallow bedrock or Quaternary deposits.

6.4.5 Existing Land, Soils and Geology Issues

Changes to land and soils from both natural processes and human activities contribute to their dynamic and evolving nature. The physical, biological and/or chemical degradation of soils, can cause direct loss of soil, and indirectly impact ecologically essential soil processes, reduce productive capacity and deplete soil quality and biodiversity.

Existing land, soil and geology issues / pressures with environmental considerations under the existing Plan include

- Soil - the loss / damage of soil from the construction of greenfield sites for development.
- Soil - contamination can occur from unauthorised waste-related activities, leakages and accidental spillages of chemicals. Technical and financial constraints on development and the threat contaminated soils pose to the health of the population.

- Soil - erosion of soils in the county from intensive agricultural / forestry practices, quarrying activities (including for sand from sensitive areas in the east of the county) and road and major infrastructural projects.
- Soil - the protection of soil and the need for a Soil Protection Strategy.
- Soil - local pollution of soil from the use of septic tanks systems to treat wastewater, from poorly maintained systems.
- Soil - disturbance of contaminated soils could result in potential for water pollution and potential further land contamination.
- Soil sealing - covering of the ground by an impermeable material. Soil sealing can potentially put biodiversity at risk, increase the risk of flooding and prevents natural drainage.
- Pressure on soil - from land-use change, intensification of agriculture, erosion, overgrazing, disposal of organic wastes to soils, afforestation, industry and urbanisation.
- Land Management - conversion of land / sites can release CO_2 into the atmosphere and further reduce areas of '*carbon sinks*'.
- Geological Heritage - the protection of sites of geological importance within the county, see Table 6.4.
- Climate change - carbon stored in soils plays an important role in maintaining soil functionality, in water and air quality and in climate change. Proper land use management is essential to prevent carbon stored in soil from being released into the atmosphere.
- Groundwater - rock types in the county that provides for a productive groundwater aquifer.

6.5 Water Quality

6.5.1 Introduction

Water is fundamental to all life; for humans, plants and animals alike. It is also critical in economic terms in generating and sustaining wealth in a number of key areas such as agriculture, fishing, power generation, industry, transport and tourism. However, it is also a fragile resource requiring protection.

Nearly half of the surface waters in Ireland are failing to meet the legally binding water quality objectives set by the EU Water Framework Directive because of pollution and other human disturbance[47]. The 2025 EPA (Water Quality in Ireland 2019-2024) assessment of water quality in Ireland, finds that surface waters and groundwater's continue to be under pressure from human activity; particularly from nitrogen and phosphorous from urban wastewater discharges and agriculture[48].

For the purposes of this section, the water environment is taken to include natural features such as lakes, rivers, streams, coastal (all surface waterbodies) and ground waterbodies. In addition flooding is also dealt with in this section. Wastewater treatment and drinking water are discussed under Material Assets in Section 5.9 of this report.

Fingal is traversed by a number of rivers and their tributaries including the River Liffey, River Tolka, River Ward, Broadmeadow River, Delvin River, Mayne River and Sluice River which are important fisheries and wildlife resources as well as being important for the ongoing provision of water services and for the management of flood risk. Other important river corridors include the River Matt, River Corduff, River Ballyboghil and River Santry. Fingal has no natural lakes. Therefore it is important that the county's drinking water supply resources are protected so that reliable, safe and good quality water supplies are always available.

[47] EPA (2020g).
[48] EPA (2021m).

Fingal County Council (FCC) is responsible for surface water management and aquifer protection in the County, with the Office of Public Works (OPW) having responsibility for flood risk management.

6.5.2 Legislation

6.5.2.1 Water Framework Directive (WFD)

The EU Water Framework Directive (WFD) (2000/60/EC) establishes a framework for the protection of both surface water and groundwater waterbodies. Since 2000, Water Management in the EU has been directed by the WFD 2000/60/EC, which was transposed into Irish law under the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003). This legislation requires governments to take a holistic approach to managing all their water resources based on natural geographic boundaries, i.e. the river catchment or basin. The WFD establishes a common framework for the sustainable and integrated management of all waters covering groundwater, inland surface waters, transitional waters and coastal waters. The WFD requires Member States to manage all of their waters and ensure that they achieve at least 'good status' by 2015 and beyond. The ultimate deadline for Member States for achievement of 'good' status is 2027 at the latest.

The strategies and objectives of the WFD in Ireland have influenced a range of national legislation and regulations. These include the following:

- European Communities (Water Policy) Regulations, 2003 (S.I. No. 722 of 2003).
- European Communities (Drinking Water) Regulations 2014 (S.I. 122 of 2014).
- European Communities Environmental Objectives (Surface Waters); Regulations, 2009 (S.I. No. 272 of 2009 as amended by S.I. No. 77 of 2019).
- European Communities Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010 as amended by S.I. No. 366 of 2016).
- European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2010 (S.I. No. 610 of 2010).
- European Communities (Technical Specifications for the Chemical Analysis and Monitoring of Water Status) Regulations, 2011 (S.I. No. 489 of 2011).

Under Article 6 of the WFD ANNEX IV Protected Areas are identified as those requiring special protection under existing national or European Legislation, either to protect their surface water or groundwater, or to conserve habitats or species that directly depend on those waters. Refer to Section 5.2.10 of this report.

6.5.2.2 Groundwater Directive

The EU Groundwater Directive (2006/118/EC) was adopted by the European Parliament in June 2006. The Groundwater Directive uses a holistic approach to groundwater by addressing the relationships between groundwater, surface water and ecological receptors. The Groundwater Directive complements the WFD setting up environmental objectives of *'good'* groundwater quantitative and chemical status, as well as ensuring a continuity to the Directive 80/68/EEC on the protection of groundwater against pollution caused by dangerous substances, which is due to be repealed by the end of 2013[49].

6.5.3 River Basin Management Plan

For the purpose of implementing the Water Framework Directive (WFD, Ireland was divided into eight River Basin Districts (RBDs) or areas of land that are drained by a large river or number of rivers and the

[49] EC (2019).

adjacent estuarine / coastal areas. The first cycle of the River Basin Management Plan (RBMP) ran from 2009-2015, where the eight RBDs devised separate plans with the objective of achieving at least '*good*' status for all waters by 2015.

The second cycle of the RBMP 2018-2021 merged all eight RBDs to form one national RBD. The RBMP sets out the actions that Ireland will take to improve water quality and achieve *'good'* ecological status in waterbodies (rivers, lakes, estuaries and coastal waters) by 2027. The third cycle of the RBMP 2022-2027 prepared by Department of Housing, Local Government and Heritage (DHLGH) in line with the *EU Water Framework Directive* (WFD) (2000/60/EC) describes programmes of measures which will be implemented to deliver water quality improvements.

Water quality data is also collected by the EPA to provide an overall status of water quality. The monitoring programme, as part of the WFD, assesses water quality but also water trends of rivers in relation to ecological and physico-chemical quality. The WFD status of rivers ranges from 'high' to 'bad'. The EPA also undertakes water quality surveys for transitional and coastal waterbodies.

Water quality in Ireland has deteriorated over the past two decades. Overall, the water quality is declining and the number of water bodies in satisfactory condition (high or good status) across rivers, lakes, estuaries, coastal waters and groundwaters has decreased under the last WFD monitoring cycle 2019-2024 as compared to the previous assessment which covered the period 2016-2021.

Water quality data is also collected by the EPA to provide an overall status of water quality. The monitoring programme, as part of the WFD, assesses water quality but also water trends of rivers in relation to their ecological status and includes biological, physico-chemical and hydromorphological status. The WFD status of rivers ranges from *'high'* to *'bad'*. The EPA also undertakes water quality surveys for transitional and coastal waterbodies.

A catchment is an area of land contributing to a waterbody, with all the water ultimately running off to a single outlet. The WFD requires water quality management to be based on natural river catchments *i.e.* by reference to the natural, environmental unit rather than by reference to administrative or legal boundaries, which often fragment river catchments. **Table 6.5** lists the WFD Catchments and WFD Sub-Catchments in the Plan area.

Table 6.5 WFD Catchments and Sub-Catchments in the Plan Area [50]

Catchment (WFD Catchment Code)	Sub-catchment Name_WFD Sub-catchment Code
Nanny-Delvin (08)	Delvin_SC_010
	Palmerstown_SC_010
	Ballough[Stream]_SC_010
	Broadmeadow_SC_010
	Nanny[Meath]_SC_010
Liffey and Dublin Bay (09)	Mayne_SC_010
	Tolka_SC_010

[50] EPA Maps (2021).

Catchment (WFD Catchment Code)	Sub-catchment Name_WFD Sub-catchment Code
	Tolka_SC_020
	Liffey_SC_100

6.5.4 Surface Water Quality Status

The WFD defines '*overall surface water status*' as the general status of a body of surface water, determined by the poorer of its ecological status and its chemical status. In order to achieve '*good surface water status*' both the ecological status[51] and the chemical status[52] of a surface waterbody need to be at least '*good*'.

The latest *Water Quality in Ireland* report 2019-2025[53] was published by the EPA in October 2025. This report provides an assessment of the condition of Ireland's waters (rivers, lakes, canals, groundwaters, transitional (estuaries) and coastal waters) against the objectives and standards set out in the Water Framework Directive and Ireland's River Basin Management Plan (Water Action Plan 2024). The assessments are made using data collected from over 4000 surface water bodies and 514 ground water bodies between 2019 and 2024. Comparisons are made between the results from this period and those before to give insight into trends in the condition of our waters over time.

In the latest assessment, covering the years 2019 to 2024, the number of water bodies in satisfactory condition (high or good status) across rivers, lakes, estuaries and canals declined since the last assessment which covered the period 2016-2021. Overall, there has been a 2% decline in the number of river waterbodies in satisfactory condition. In contrast, coastal waters and groundwaters improved slightly over the assessment period. Overall, there has been a net decline in our water quality. The slight decline reported in this assessment reflects the ongoing pattern of continuing declines in water quality seen since the first assessment of ecological status was undertaken in the period 2007-2009. There has been 5% decline (7 water bodies) in the number of estuarine water bodies in satisfactory condition. This decline is most evident in the south and south west of the country. There has been a 1% improvement (1 water body) in the number of coastal water bodies in satisfactory condition. There has been a 0.2% improvement in the quality of our groundwaters with just over 8% of groundwater bodies (1 water body) in poor condition.

6.5.4.1 Surface Water Quality Status in Fingal

Surface water quality is monitored periodically by the EPA at various regional locations along principal and other smaller watercourses. The status of the river waterbodies in County Fingal ranges from 'good' to 'poor' however the majority of the major river waterbodies range from '*poor*' to *'moderate'*.

In accordance with the WFD, each river catchment is assessed by the EPA and a Water Management Plan detailing the programme of measures was put in place for each. Currently, the EPA classifies the WFD river waterbody risk score of 1a, *'at risk of not achieving good status*'.

[51] **Ecological status** is an expression of the structure and functioning of aquatic ecosystems associated with surface waters.

[52] **Chemical Status** is a pass/fail assignment with a failure defined by a face-value exceedance of an Environmental Quality Standards (EQS) for one or more Priority Action Substances (PAS) listed in Annex X of the Water Framework Directive (WFD).

[53] Water Quality In Ireland 2019-2024 - https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/water-quality-in-ireland-2019-2024.php

Fingal is traversed by a number of rivers and their tributaries including the River Liffey, River Tolka, River Ward, Broadmeadow River, Delvin River, Mayne River and Sluice River.

The **River Liffey** source is located in Wicklow and the river drains lands in Wicklow, Kildare, South Dublin, Fingal and Dublin City. The river flows in an easterly direction through Fingal. Part of the River Liffey water quality status along the Fingal boundary is '*poor*' status and is 'at risk' of not achieving good status.

The **River Tolka** rises near Dunshaughlin in Co. Meath and flows in a south-easterly direction for c. 22km before entering the sea at Clontarf on the north side of Dublin City. The River Tolka water quality status is *'poor',* as it flows through Fingal, and is '*at risk*' of not achieving good status.

The **River Ward** flows in an easterly direction and it a tributary of the Broadmeadow River. The River Ward flows into the sea at Swords, Co. Dublin. The River Ward water quality status is '*moderate*', as it flows through Fingal, and is generally at '*at risk*' of not achieving good status.

The **Broadmeadow River** has its source north of Dunshaughlin in Co. Meath and flows for c. 24km across agricultural land before it reaches the sea, north of Swords, at the Broadmeadow Estuary. The Broadmeadow River water quality status is *'poor',* as it flows through Fingal, and is '*at risk*' of not achieving good status.

The **Delvin River** rises close to the Meath-Dublin border near the village Naul and flows in a north-easterly direction for c. 16km before entering the sea close to Balbriggan Co. Dublin. The Delvin River water quality status ranges from '*moderate*' to *'poor'*, as it flows through north Fingal, and is '*at risk*' of not achieving good status.

The **Mayne River** flows in an easterly direction into the sea at Baldoyle Bay / Mayne Estuary. The Mayne River has a '*poor*' water quality status and is '*at risk*' of not achieving good status.

The **Sluice River** rises to the north of Dublin Airport and flows in an easterly direction into Baldoyle Bay / Mayne Estuary. The Sluice River water quality status is *'poor'* and risk status is *'under review'.*

Other river corridors within the Plan area include the River Matt ('moderate' and '*at risk*'); River Ballyboghil ('poor' and '*at risk*'); River Santry ('poor' and '*at risk*'); Mill Stream (Skerries) ('poor' and 'at risk'); Balcunnin ('poor' and 'under review'); Palmerstown ('poor' and 'under review'); Turvey ('poor' and 'at risk'); Gaybrook ('poor' and 'under review');

The WFD status of the **transitional waterbodies** in Fingal ranges from *'poor'* to *'moderate'* during the 2019-2024 monitoring period. The transitional waterbodies in Fingal are the:

- Rogerstown Estuary (IE_EA_050_0100) (poor status and '*at risk*' of not achieving good status);
- Broadmeadow Estuary (IE_EA_060_0100) (moderate status and '*at risk*' of not achieving good status);
- Baldoyle Bay / Malahide Estuary (IE_EA_080_0100) (moderate status and under review); and
- North Bull Island (IE_EA_090_0100) (moderate status and under review).

The WFD status of the **coastal waterbodies** in Fingal ranges from '*good*' to '*moderate*' during the 2019-2024 monitoring period, and therefore are listed as '*Not at Risk*' by the EPA. The coastal waterbodies in Fingal are the: (Refer to Figure 6.10)

- North-western Irish Sea (IE_EA_020_0000) (good status and '*at risk*' of not achieving good status);
- Rockabill (IE_EA_040_0000) (unassigned and under review);
- Malahide Bay (IE_EA_060_0000) (moderate status and '*at risk*' of not achieving good status);
- Irish Sea (IE_EA_070_0000) (good status and not at risk); and

- Dublin Bay (IE_EA_090_0000) (good status and not at risk).

6.5.5 Coastal Waters

Coastal waters are important for tourism, for bathing locations and for supporting marine wildlife. The process for monitoring and assessing bathing water quality is set out in the EU Bathing Water Directive (2006/7/EC) and transposed into Irish Legislation as the Bathing Water Regulations S.I. No. 79 of 2008.

In line with Directive 2014/89/EC (establishing a framework for maritime spatial planning), the Department of Housing, Local Government and Heritage, published the National Marine Planning Framework in July 2021[54]. It sets out a national strategy for the strategic planning and sustainable development in the maritime area for the purpose of achieving ecological, economic and social priorities (managing marine assets). Common terrestrial / marine policy areas include renewable energy, electricity networks, coastal and flood defences, fishing and aquaculture, ports and harbours, public access, tourism and recreation, protected sites and species, seascape and landscape.

Fingal's coastline is also a valuable amenity, and any recreational amenities along the coastline should be sustainably designed and carefully sited. The coastline extends from Kilbarrack Stream in the south of the county to the Delvin River located north of Balbriggan. It is characterised by a series of shallow bays between headlands with a variety of inlets, islands, harbours and beaches. It is the single most important natural resource in the county. It has significantly influenced the development of Fingal by providing a means of transportation for people and goods or a source of food and employment through the fishing industry. The coast also contains many sensitive ecosystems, ranging from sand dune systems to estuaries rich in marine and bird life.

6.5.5.1 Bathing Waters

Bathing water is the term used for those locations where swimming or recreational use of beaches and lakes is practiced. In Ireland, bathing water information is compiled by the EPA from data submitted from local authorities. During the bathing season (1 June to 15 September), water quality at each bathing area must comply with the minimum EU mandatory value and all bathing areas should endeavour to achieve the stricter EU guide values[55].

There are ten designated bathing waters along the Fingal coastline, listed below. The most recent report on bathing water quality 'Bathing Water Quality in Ireland - A Report for the Year 2024'[56] sets out the status of Irish Seawater and Freshwater Bathing areas. The 2024 Annual Water Quality monitoring period results are:

- Skerries, South Beach (Good);
- Loughshinny Beach (Sufficient);
- Rush, North Beach (Excellent);
- Rush, South Beach (Good);
- Portrane, the Brook Beach (Sufficient);
- Donabate, Balcarrick Beach (Excellent);
- Portmarnock, Velvet Strand Beach (Excellent);
- Sutton, Burrow Beach (Good); and

[54] National Marine Planning Framework. (2021).
[55] Bathing water is assessed for compliance with two sets of EU standards, as specified in the Directive (2006/7/EC), minimum quality standards (EU mandatory values) and more stringent quality targets (EU guide values).
[56] EPA (2025) https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/bathing-water-quality-in-ireland-in-2024.php

- Claremont Beach, Howth (Sufficient).

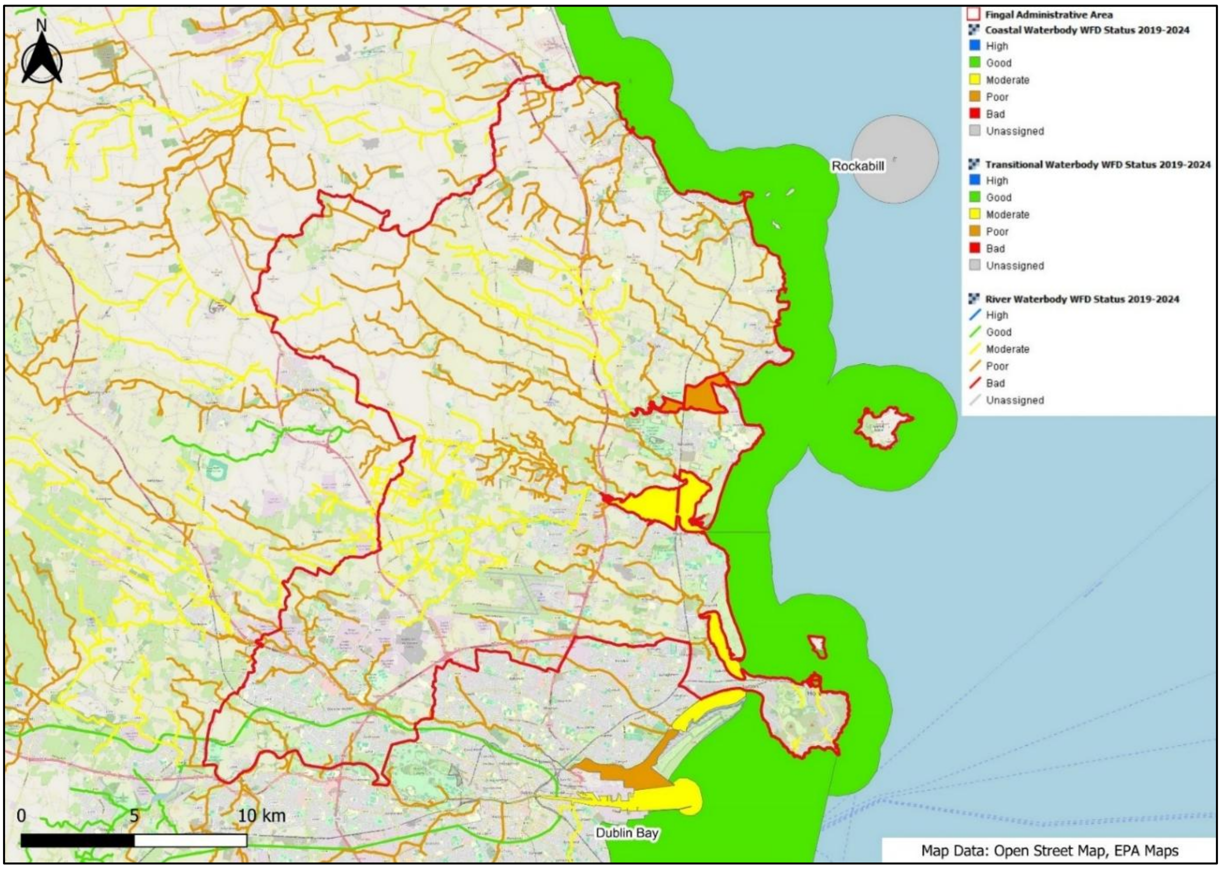
6.5.5.2 Coastal Protection

The coast is an ever changing dynamic environment, subject to the continuous natural processes of erosion and deposition. While erosion is a normal occurrence in coastal areas, rates of erosion may be accelerated due to storm action, inappropriate development, pressures from leisure or recreational activities or the presence of man-made protection works.

The Irish Coastal Protection Strategy Study (ICPSS) is a national study that was commissioned in 2003 with the objective of providing information to support decision making about how best to manage risks associated with coastal flooding and coastal erosion. The Study was completed in 2013 and provides strategic current scenario and future scenario (up to 2100) coastal flood hazard maps and strategic coastal erosion maps for the national coastline[57].

Coastal development must take account of the changing and dynamic nature of the coast and the need for coastal protection. The coastal zone is subject to growing pressures from increasing population and increasing and sometimes conflicting social, economic and recreational uses.

Figure 6.10 WFD River Waterbody Status for Fingal 2019-2024[58]



[57] OPW (2019).
[58] EPA Maps (2025)

6.5.6 Groundwater Quality

Groundwater is important for a drinking water supply as well as the supply to surface waters. The National Groundwater Monitoring Programme assesses the general state of groundwater quality and groundwater levels and flows[59].

Groundwater WFD Quality Status in Fingal from 2019 to 2024 was generally '*good*'[60] and therefore, the Plan must protect groundwater from deterioration.

There is only one small areas of '*poor*' quality groundwater present at the industrial facility (P0014-03 / P0060-01), at Swords.

6.5.6.1 Aquifer Vulnerability

Groundwater aquifers form important sources of drinking water both locally and regionally. Much of the summer seasonal flow in many rivers is also derived from groundwater sources. To maintain high quality water resources within the plan area, it is important that development is controlled and managed appropriately, in particular in areas of high groundwater vulnerability to avoid transmission of pollutants into important aquifers.

The GSI rates aquifers according to both their productivity and vulnerability to pollution. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of karstic limestone, where surface streams sink underground at swallow holes. Aquifer vulnerability is the ease with which pollutants of various kinds can enter into groundwater. The groundwater aquifer vulnerability of Fingal is shown Figure 6.11 and generally classified as being of:

- *Extreme* vulnerability and '*X' (Rock at or near surface or karst),* in areas to the north, southwest and parts of the eastern Plan boundary;
- *High* and *Moderate* vulnerability, in areas to the north and southwest; and
- *Low* vulnerability, in the middle and towards the south of the county.

The centre and south of Fingal is underlain with a (LI) 'locally important aquifer – Bedrock which is Moderately Productive only in Local Zones', with some areas having a (PI) 'Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones'. The north of the county is mainly underlain with a (LM) 'locally important aquifer – Bedrock which is Generally Moderately Productive' and north-eastern areas having both either a PI) 'Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones' or a (LK) 'locally important aquifer – karstified. The bedrock aquifer of Fingal is shown on Figure 6.12.

[59] EPA (2018).
[60] EPA Maps (2021).

Figure 6.11 Groundwater Aquifer Vulnerability - Fingal[61]

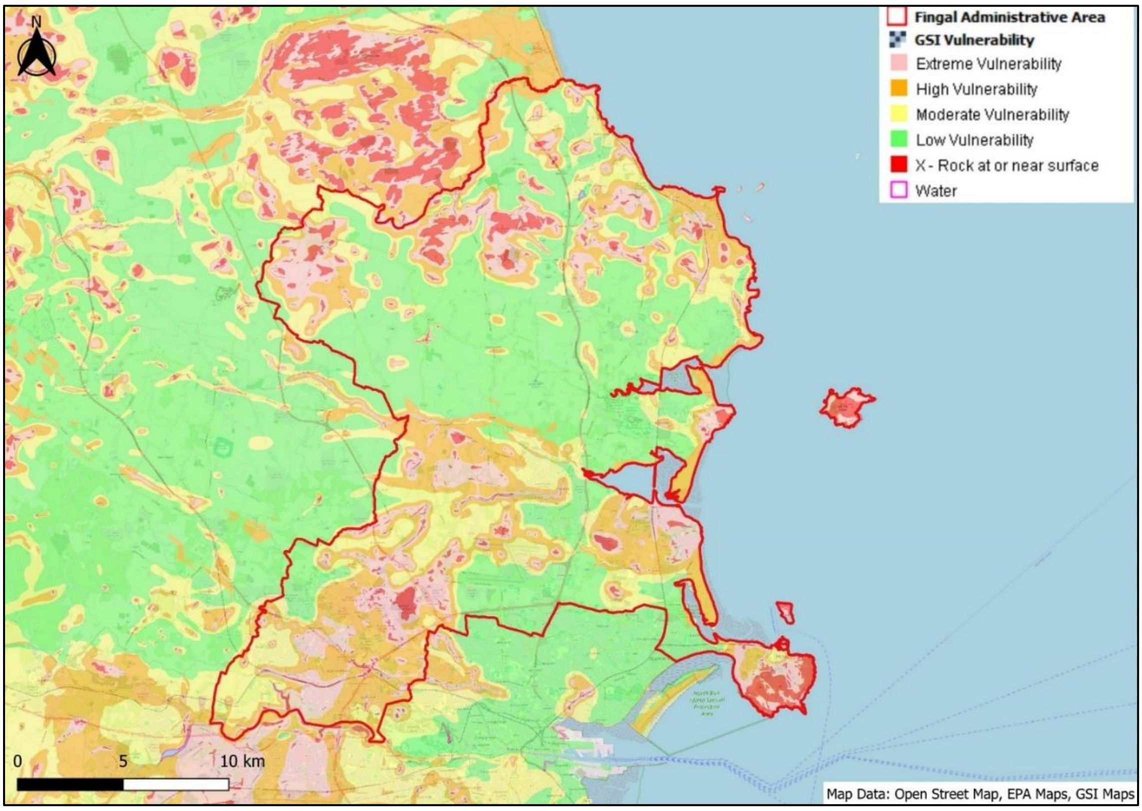
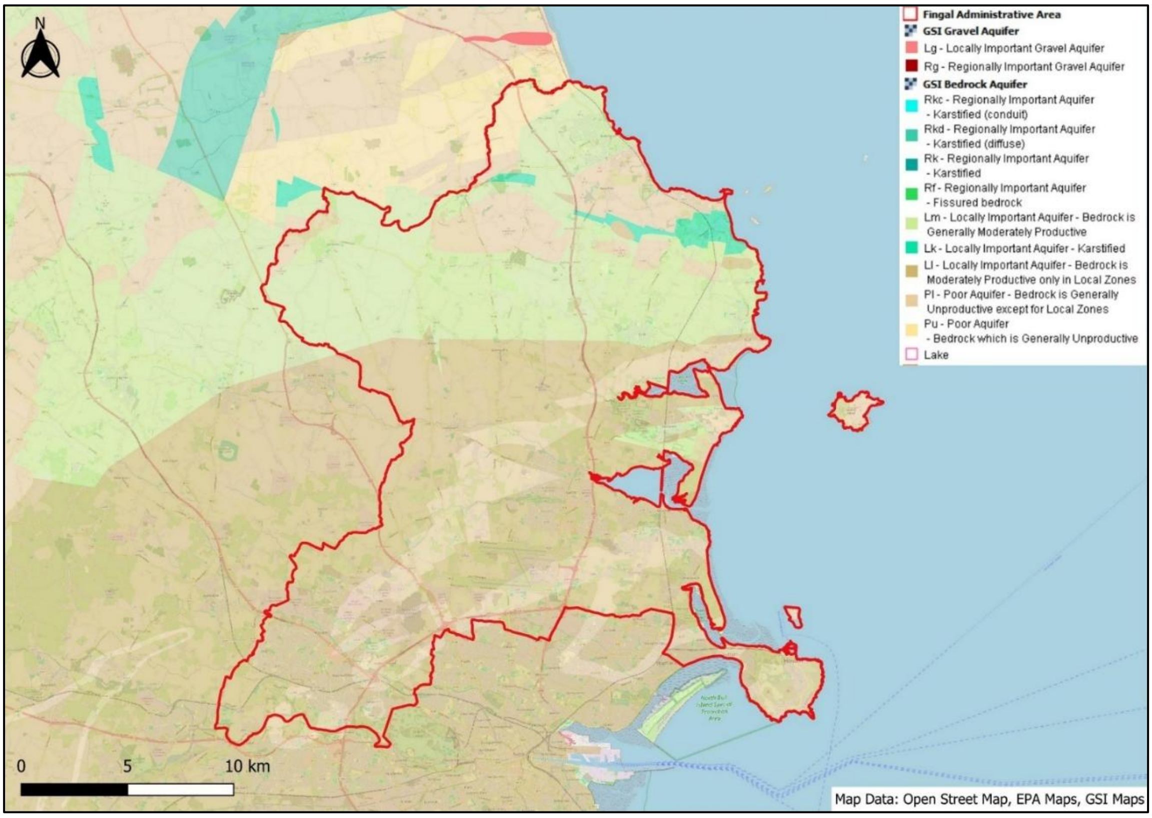


Figure 6.12 Bedrock Aquifer - Fingal [62]



[61] EPA Maps (2025). *Source OpenStreet Maps*.
[62] GEOHIVE Environmental Sensitivity Mapping (2025).

6.5.7 WFD Registers of Protected Areas

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

- areas from which waters are taken for public or private water supply schemes;
- designated shellfish production areas;
- bathing waters;
- areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species e.g. Salmonid areas; and
- Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

Refer to Section 5.2.10 for the full list of RPAs in the Plan Area.

6.5.8 Sustainable Urban Drainage Systems

Surface water on all new development sites should be managed through Sustainable urban Drainage Systems (SuDS). SuDS aims to reduce the rate and quantity of surface water runoff, and improve water quality from the site. On large developments, SuDS may provide an opportunity to enhance biodiversity and amenity.

The objective of SuDS in new developments is to replicate, as closely as possible, the surface water drainage regime to the predevelopment 'greenfield' situation. This is achieved through the use of surface water source control and site control measures. Source control measures include rainwater harvesting, natural infiltration, infiltration trenches, filter drains, filter strips, swales and permeable paving. Site control measures include attenuation by means of tanks or retention ponds. The surface water runoff rate from the site must be limited to the 'greenfield' runoff rate to reduce the risk of flooding.

6.5.9 Flooding and Flood Risk

Floods are usually caused by a combination of events including overflowing river banks, heavy rains, coastal storms or blocked or overloaded drainage systems and an increase in development and impermeable surfacing. Numerous severe floods have occurred throughout the county in the last decade causing significant damage to property.

Certain factors affecting the extent and severity of the flood can be addressed. The most influential of these factors is development, in particular development in flood plains i.e. areas adjacent to rivers that tend to become flooded following periods of heavy rain.

Flood risk can be defined as the probability of flooding multiplied by the consequences of flooding. In 'The 'Planning System and Flood Risk Management', Guidelines for Planning Authorities, the probability of a flood event taking place is recognised through the classification of Flood Zones which indicate a high, moderate or low risk of flooding from fluvial or tidal sources. The Office of Public Works (OPW) is the lead State body for flood risk management.

The National Catchment Flood Risk Assessment and Management (CFRAM) Programme has been the principle vehicle to deliver on Ireland's commitments under the EU Floods Directive (2007/60/EC). The OPW undertook the CFRAM Programme to give a clear and comprehensive picture of flood risk in areas of potentially significant flood risk and to set out how to manage the flood risk effectively and sustainably[63].

In line with The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), a Strategic Flood Risk Assessment (SFRA) of Fingal will be carried out to inform the preparation of the Draft Variation. The SFRA will take place concurrently with the preparation of the Draft Variation and SEA and has informed both, including integration of flood risk management considerations into the Draft Variation.

Fingal is susceptible to several types of flood risk, including:

- Fluvial - Flooding occurs when a river overtops its banks due to a blockage in the channel or the channel capacity is exceeded.
- Pluvial - Flooding occurs when overland flow cannot infiltrate into the ground, when drainage systems exceed their capacity or are blocked and when the water cannot discharge due to a high water level in the receiving watercourse.
- Tidal / Coastal - Flooding which is caused by high sea levels resulting in the sea overflowing onto the land. High sea levels can be caused by high tides, storm surges and wave action acting independently or in combination.
- Groundwater - Flooding occurs when the level of water stored in the ground rises as a result of prolonged rainfall to meet the ground surface and flows out over it.

Local conditions within the county also increase the risk of flooding; these include bridges and culverts, which restrict high flows, debris which can cause blockages and land use changes.

6.5.10 Existing Water Quality Issues

The principal threat to water is pollution which can adversely impact on all parts of the water cycle from groundwater to rivers, lakes estuaries and coastal waters.

Any development as part of the Draft Variation has the potential to impact waterbody status, water usage, flood risk and generate wastewater. The Plan must fully meet the requirements of the WFD and the Groundwater Directive and aim to drive improvement to water quality in both the short and long-term. Existing water quality issues / pressures with environmental considerations under the existing Plan include:

- Water - the surface waterbodies in Fingal need to be improved to achieve *'good'* ecological status in waterbodies by 2027.
- Water - pressure on water sources include excessive nutrient enrichment leads to eutrophication; agriculture and municipal sources are the most important suspected causes of pollution to rivers.
- Water - pressure on water sources also comes from land-use changes, intensification of agriculture, erosion, afforestation, industry and urbanisation.
- Water - water contamination arising through poor working practices, leakages or accidental spillage of materials if efficient pollution control measures are not fully implemented and maintained. Leachate from landfills, eutrophication and acidification from forestry.
- RBMP - implementation of the actions set out in the Plan.
- Groundwater - the development of a wastewater leak detection programme and the implementation and enforcement of regulations. Groundwater WFD Quality Status in Fingal (2019-2024) was generally *'good'* and needs to be protected.

[63] OPW (2020).

- **Surface, ground & coastal waters** - are at risk of pollution from septic tanks and wastewater treatment systems in the vicinity of waterbodies.
- **Coastal** - the coastal zone is subject to growing pressures from increasing population and increasing and sometimes conflicting social, economic and recreational uses.
- **Flooding** - flood risk to be considered in Development Plan SEA documents as a key environmental criteria.
- **Flooding** - there is historic and predictive evidence of elevated levels of flood risk from fluvial, pluvial, tidal / coastal and groundwater sources at various locations across the county.
- **Quarries** - pose a potential impact on the level of water tables and potential exposure of water table and contaminant to water tables.

6.6 Air Quality, Climate Change & Nosie

6.6.1 Air Quality & Climate - Introduction

Air quality legislation in Ireland highlights the need 'to avoid, prevent or reduce harmful effects on human health and the environment as a whole'. In addition, it requires that Local Authorities where appropriate 'shall promote the preservation of best ambient air quality compatible with sustainable development'.

6.6.2 Air Quality & Climate - Legislation / Policy / Guidance

EU legislation on air quality requires that Member States divide their territory into zones for the assessment and management of air quality, where reporting of national air pollutants and air quality is an obligation for all European member states.

6.6.2.1 Ambient Air Quality Standards

To reduce the risk to health from poor air quality, national and European statutory bodies have set limit values in ambient air for a range of air pollutants. These limit values or 'Air Quality Standards' are health or environmental-based levels for which additional factors may be considered. For example, natural background levels, environmental conditions and socio-economic factors may all play a part in the limit value which is set.

Air quality significance criteria are assessed on the basis of compliance with the appropriate standards or limit values. The applicable standards in Ireland are set out in *Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast)*. This directive supersedes *EU Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (CAFE Directive)*. Directive (EU) 2024/2881 sets out air quality standards for pollutants to be reached by 2026 and by 2030 which are more closely aligned with the World Health Organisation (WHO) air quality guidelines.

The ambient air quality limit values for pollutants are set out in Annex I of Directive (EU) 2024/2881. Table 1 of Annex I in Directive (EU) 2024/2881 sets out the updated air quality limit values for pollutants to be achieved by 1 January 2030, which are more closely aligned with the WHO air quality guidelines. Table 2 of Annex I in Directive (EU) 2024/2881 sets out the limit values for air pollutants which are to be achieved by 11 December 2026 and are also applicable up to 2030. The limit values in Table 2 of Annex I are the same as the limits set under Directive 2008/50/EC and the Air Quality Standards Regulations 2022.

The Ambient Air Quality Standards Regulations 2022 (S.I. 739 of 2022) (the Air Quality Standards Regulations 2022) further transposed the CAFE Directive and revoked the Air Quality Standards Regulations 2011, as amended. With the adoption of Directive (EU) 2024/2881, Ireland must transpose this directive into national law, i.e. update the Air Quality Standards Regulations, before December 2026.

6.6.2.2 Climate Legislation

In 2015, the Climate Action and Low Carbon Development Act 2015 (No. 46 of 2015) (as amended) (Government of Ireland, 2015) was enacted (the 2015 Act). The purpose of the 2015 Act was to enable Ireland" *to pursue, and achieve, the transition to a low carbon, climate resilient and environmentally sustainable economy by the end of the year 2050"* (3.(1) of No. 46 of 2015). This is referred to in the 2015 Act as the 'National Transition Objective'. The 2015 Act made provision for a national mitigation plan, and a national adaptation framework. In addition, the 2015 Act provided for the establishment of the Climate Change Advisory Council with the function to advise and make recommendations on the preparation of the national mitigation and adaptation plans and compliance with existing climate obligations.

The first Climate Action Plan (CAP) was published by the Irish Government in June 2019 (Government of Ireland, 2019). The Climate Action Plan 2019 outlined the current status across key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and outlined the various broadscale measures required for each sector to achieve ambitious decarbonisation targets. The 2019 CAP also detailed the required governance arrangements for implementation including carbon-proofing of policies, establishment of carbon budgets, a strengthened Climate Change Advisory Council and greater accountability to the Oireachtas. The fifth and most recent climate action plan, CAP25, was published in April 2025 (Government of Ireland, 2025).

Following on from Ireland declaring a climate and biodiversity emergency in May 2019, and the European Parliament approving a resolution declaring a climate and environment emergency in Europe in November 2019, the Government approved the publication of the General Scheme in December 2019, followed by the publication of the Climate Action and Low Carbon Development (Amendment) Act 2021 (hereafter referred to as the 2021 Climate Act) in March 2021. The Climate Act was signed into Law on the 23rd of July 2021, giving statutory effect to the core objectives stated within the CAP.

In relation to carbon budgets, the 2015 Act (as amended) states "*a carbon budget, consistent with furthering the achievement of the national climate objective, shall be proposed by the Climate Change Advisory Council, finalised by the Minister and approved by the Government for the period of 5 years commencing on the 1 January 2021 and ending on 31 December 2025 and for each subsequent period of 5 years (in this Act referred to as a 'Budget Period'*)".

The carbon budget is defined as the total amount of greenhouse gas emissions that are permitted during the budget period. The carbon budget is to be produced for 3 sequential budget periods. The carbon budget can be revised where new obligations are imposed under the law of the European Union or international agreements or where there are significant developments in scientific knowledge in relation to climate change. In relation to the sectoral emissions ceiling, the Minister for the Environment, Climate and Communications (the Minister for the Environment) shall prepare and submit to government the maximum amount of GHG emissions that are permitted in different sectors of the economy during a budget period, and different ceilings may apply to different sectors. The sectorial emission ceilings for 2030 were published in the Climate Action Plan 2025 (CAP25) (Government of Ireland, 2025).

6.6.2.3 Greenhouse Gas Assessment Policy

In 2024, the Government published its *Long-Term Strategy on Greenhouse Gas Emissions Reductions* (Government of Ireland, 2024e). This strategy provides a long-term plan on how Ireland will transition towards net carbon zero by 2050, achieving the interim targets set out in the CAP.

In December 2023, CAP24 was published, establishing key actions to deliver a 51% reduction in GHG emissions by 2030 (compared to 2018 levels) and achieve climate neutrality by 2050 (Government of Ireland, 2023a). The updated and current CAP25, published in April 2025, builds on the progress of the previous four iterations of the CAP, with CAP23 first publishing carbon budgets and sectoral emission ceilings, and reaffirms Ireland's climate ambition, with a focus on delivery, implementation and measurable outcomes, particularly ahead of the second carbon budget period (2026–2030). 2025 is the last year in the first 5-year carbon budget period. During the initial 5-year budget period the average annual reduction required was 4.8%, this increases to 8.3% in the second budget period (2026-2030). CAP25 retains the high-impact sectors where the biggest savings can be achieved, while emphasising public sector leadership and green procurement. These sectors include renewable energy, energy efficiency of buildings, transport, sustainable farming, sustainable business and land-use change.

CAP25 also includes targeted actions to decarbonise industrial heat and support the transition to carbon-neutral manufacturing processes. Public sector leadership is strengthened through a new *Buying Greener: Green Public Procurement Strategy and Action Plan (2024–2027)*, the development of mandatory Climate Action Roadmaps, and enhanced emissions monitoring and reporting across government operations.

CAP25 highlights a significant 17% reduction in electricity emissions in early 2024, with wind power supplying nearly 40% of Ireland's total electricity demand and over 100,000 rooftop microgenerators connected to the grid. Investments are ongoing in grid reinforcement, offshore wind development, and interconnectors with France and the UK to enhance renewable generation capacity.

CAP25 also reinforces targets first outlined in CAP24 to reduce the embodied carbon of construction materials, with a 10% reduction by 2025 and 30% reduction by 2030 for materials produced and used in Ireland. Cement and high embodied carbon construction materials can be reduced through product substitution, reduced clinker content in cement and uptake of low-carbon construction methods, including those outlined in the Construction Industry Federation 2021 report Modern Methods of Construction (Construction Industry Federation, 2021). There also remains scope for the construction industry to use more timber in construction. In 2022, 24% of new construction in Ireland was built using timber frames to satisfy the demand for housing. Public bodies are now required under the Public Sector Mandate to use best practice project design to reduce embodied carbon; procure concretes with clinker replacements (lower carbon); and require that large construction projects produce a whole life cycle GHG emissions assessment.

Furthermore, CAP25 advances sector-specific measures in green procurement, electrification of transport and heat, and just transition (with the introduction of a Just Transition Commission) to support vulnerable communities. Transport emissions increased by 0.3%. Electric vehicles and the use of biofuels are stated as the best means of transport emission reductions in the medium term.

6.6.2.4 Climate Change Adaptation Policy

The Fingal County Council (FCC) Climate Action Plan 2024-2029 (FCC and Codema, 2024) outlines FCC's goals to mitigate GHG emissions and plans to prepare for and adapt to climate change. The FCC Climate Action Plan states that FCC aims to reduce car dependency by encouraging modal shifts from cars to active travel and more sustainable modes, including public transport and cycling. FCC also states that it wishes to work with the relevant transportation bodies to introduce measures to achieve modal shifts.

The FCC Climate Action Plan highlights the risks that climate change poses to the transportation network, with risks mainly associated with extreme weather events. The FCC Climate Action Plan notes that cold spells and flooding (pluvial, fluvial coastal, etc) and have the greatest future risk when both the likelihood and consequence are accounted for. Increases in flooding will cause an inundation of residential properties, damages to commercial buildings and premises, and disruption of transport networks.

6.6.2.4.1 Climate Change Vulnerability Policy

The second National Adaptation Framework (NAF) (Government of Ireland, 2024f) was published in June 2024 in line the five-year requirement of the 2015 Climate and Low Carbon Development Act. The plan provides a whole of government and society approach to climate adaptation in Ireland to reduce Irelands vulnerability to climate change risks including extreme weather events, flooding, drought, loss of biodiversity, sea level rise and increased temperatures. Like the *"Just Transition"* when considering carbon emissions, the NAF aims for *"Just Resilience"* stating that *"a climate resilient Ireland will have a reduced reliance on fossil fuel; it will have widely accessible electrified public transport and will have transitioned towards sustainable agricultural practices such as agroforestry and organic farming".*

In relation to the built environment the NAF states in Chapter 3 "*deepening of adaptation considerations in the planning and building standards processes is considered the most appropriate way of increasing the resilience of the built environment*". Within the NAF it mentions that there is a risk of damage to buildings and structures from severe weather events such as high winds and intense rainfall. New development should accommodate predicted future climate change impacts without requiring major redesign or redevelopment in the future which may be costly and inefficient. This will require facilitating innovative building design, new materials and standards (to accommodate hotter summers while withstanding changes in precipitation patterns and more intense storms for example) according to the NAF (Government of Ireland, 2024f).

6.6.3 Air Quality Monitoring

Air quality legislation[64] in Ireland highlights the need '*to avoid, prevent or reduce harmful effects on human health and the environment as a whole*'. In addition, it requires that Local Authorities where appropriate '*shall promote the preservation of best ambient air quality compatible with sustainable development*'.

EU legislation on air quality requires that Member States divide their territory into zones for the assessment and management of air quality. The EPA manages the national ambient air quality monitoring network and measures the levels of a number of atmospheric pollutants. The current trends in air quality in Ireland are reported in the EPA publication '*Air Quality in Ireland 2024*'[65] which is currently the most up to date analysis of air quality data for Ireland. Four national air quality zones have been designated in Ireland, these are:

- Zone A is the Dublin conurbation;
- Zone B is the Cork conurbation;
- Zone C comprises of 23 large towns in Ireland with a population of >15,000; and
- Zone D is the remaining area of Ireland.

64 S.I. No. 739/2022 – Ambient Air Quality Standards Regulations 2022 - https://www.irishstatutebook.ie/eli/2022/si/739/made/en/print and Directive (EU) 2024/2881 of the European Parliament and of the Council of 23 October 2024 on ambient air quality and cleaner air for Europe (recast) - https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202402881
65 EPA, 2025: Air Quality in Ireland, 2024 - https://www.epa.ie/publications/monitoring--assessment/air/air-quality-in-ireland-2024.php

Fingal is separated into Zone A for the Dublin conurbation, Zone C for the area surrounding Balbriggan and Zone D for rural areas[66]. The main sources of air pollution are domestic solid fuel burning, diesel fuelled vehicle emissions, agriculture, industry and even natural sources such as sea salt and wind-blown dust.

The air quality index for health (AQIH) regions are calculated on an hourly basis at various locations around Ireland[67]. The AQIH is based on measurements of five air pollutants all of which can harm health. The five pollutants are:

- Ozone gas;
- Nitrogen dioxide gas (combustion of fossil fuels);
- Sulphur dioxide gas (combustion of fossil fuels);
- $PM_{2.5}$ particles (combustion of fossil fuels); and
- PM_{10} particles (combustion of fossil fuels).

The EPA AQIH map show whether air quality is '*good*', '*fair*', '*poor*' or '*very poor*' in each region. The current air quality across Fingal is *'good'*[68]. There are three AQIH monitoring locations in Fingal at Blanchardstown, Swords and Dublin Airport[69].

There is a need to protect and improve, (as appropriate), air quality in Fingal, particularly in areas zoned for increased urban related development. Fingal County Council (FCC) will support the implementation of the *'Air Quality Management Plan'* in co-operation with the other Dublin Local Authorities.

6.6.3.1 Licensed Facilities

A system of **Integrated Pollution Prevention and Control (IPPC)** licensing came into effect in Ireland on 12 July 2004. The primary aims of IPPC licensing are to prevent or reduce emissions to air, water and land, to reduce waste and to use energy efficiently. An IPPC licence is a single integrated licence which covers all emissions from the facility and its environmental management. The IPPC system replaces Integrated Pollution Control (IPC).

In Fingal, there are 57 no. IPPC licenses covering activities at 39 no. individual facilities[70].

6.6.4 Noise - Introduction

In general, low environmental sound levels can contribute significantly to the good health and quality of life for the population in Fingal.

6.6.5 Noise - Legislation / Policy / Guidance

The objectives of EU and Irish noise legislation is '*to avoid, prevent or reduce harmful effects on human health and the environment as a whole*', and this includes noise nuisance. The Noise Directive - Environmental Noise Directive (END) 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing community policy on noise reduction from source. The Directive requires competent authorities in Member States to:

[66] EPA Maps (2021).
[67] The AQIH is calculated on an hourly basis using representative sampling from each region. (Dublin, Cork, large towns, small towns, rural east and rural west.
[68] EPA Maps (2021).
[69] EPA Maps (2021).
[70] FCC (2023).

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

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

The Environmental Noise Directive requires that a noise action plan is prepared based on the strategic noise maps for areas within the agglomeration of Dublin to address the issues of road, rail and industrial noise. The agglomeration of Dublin combining six Action Planning Authorities (APAs), made up of the four Dublin local Authorities as well as Kildare County Council and Wicklow County Council, have jointly prepared the Dublin Agglomeration Noise Action Plan 2024-2028.

The Round 4 strategic noise maps were prepared and published in March 2023. *Noise Strategic Maps* from EPA (2022) are presented below in **Figure 6.13**. These strategic noise maps are to be used to identify priorities (Important Areas and Priority Important Areas) for noise action plans, which are to be made or revised every 5 years by designated action planning authorities. They can also be used to identify potential quiet areas in the three noise agglomerations.

During the implementation of the Variation consideration should be given to protect, where relevant, any designated quiet areas in open country.

6.6.6 Dublin Airport

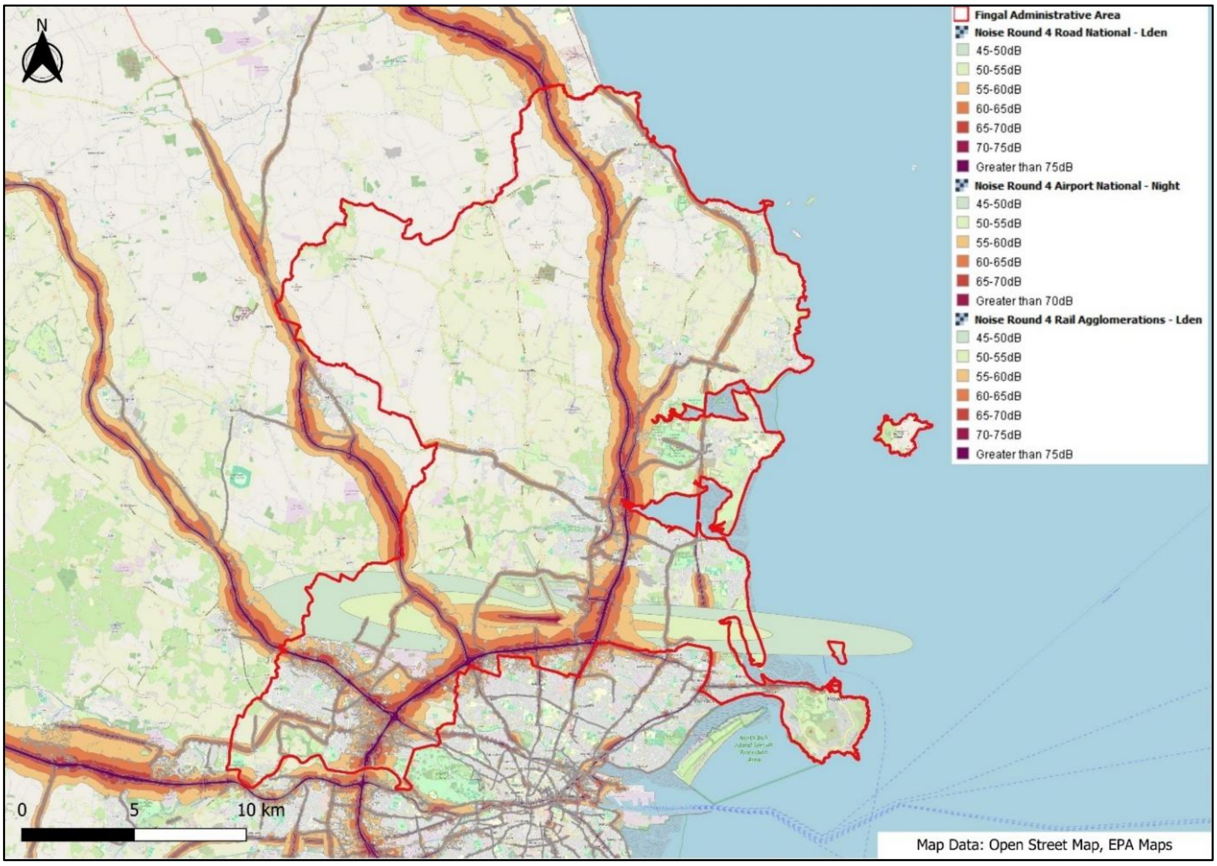
Dublin International Airport is located within Fingal and is a significant source of noise for the county. The management of airport noise is an ongoing challenge and is the responsibility of the Dublin Airport Authority (daa) and the Irish Aviation Authority. There are two noise zones covering Dublin Airport:

- **Outer Noise Zone**: to strictly control inappropriate development and to require noise insulation where appropriate; and
- **Inner Noise Zone**: to resist new provision for residential development and other noise- sensitive uses.

Fingal County Council (FCC) will continue to promote appropriate land use patterns in the vicinity of the flight paths and will strive to restrict housing development in order to minimise the exposure of residents of such developments to undesirable noise levels. This will further reduce the potential for future conflict between airport operations and residents. The continued restriction of inappropriate development in the Outer Noise Zone and the restriction of noise sensitive uses in the Inner Noise Zone will continue to be pursued by the planning authority.

Noise Action Plan 2024-2028 has been prepared for Dublin Airport that provides an overview of the Regulations with a review of the results of the latest strategic noise maps for Dublin Airport and sets out an approach for the strategic management and control of environmental noise associated with aircraft activity at Dublin Airport over the period 2024 to 2028 having regard to the existing noise management framework.

Figure 6.13 Strategic Noise Map Round 4 (Roads, Rail & Airport)[71]



6.6.7 Existing Air Quality, Noise and Climate Change Issues

Ireland's air quality currently is good, relative to other EU Member States, but maintaining this standard is a growing challenge. In urban areas, concern has shifted to a range of pollutants associated with domestic fossil fuel use and road traffic which may be considered relatively new in the context of air quality control.

The key issue regarding air quality for the Variation area is likely to be the impact on air quality from domestic fossil fuel use and traffic. The emissions measured in this regard are NO_2, CO_2 and PM and can have an impact on human health. However, the potential impacts from an increase in traffic volumes will be assessed at project level. To address the issues of particulate matter, Ireland needs to move towards clean ways of heating our homes and improving their energy efficiency. To reduce the impact of NO_2, there needs to be a change in our land use, energy and transportation choices.

Existing air quality issues / pressures with environmental considerations include:

- Air emissions - associated with the high use of the private car.
- Air emissions - associated with the burning of fossil fuels to heat homes / buildings, emissions from the construction industry and industrial activities.
- Noise pollution is considered to be one of the most damaging and prevalent forms of nuisance and pollution within urban areas. High levels of traffic noise especially can have a detrimental effect on the quality of life, and on human health.

Existing noise issues / pressures with environmental considerations include:

[71] EPA Round 4 Maps (2025).

- **High noise levels** - areas of high noise.
- **Noise levels** - noise associated with increased traffic on major roads.
- **Noise levels** - increasing traffic volumes affect the acoustic environment.
- **Noise levels -** noise associated with aircraft / flight path.
- **Development** - new development such as roads, housing developments and industry, must adhere to international best practice standards for noise attenuation.

The potential effects of **Climate Change** resulting in an increase in the frequency and severity of flooding and storms events must also be considered in the Draft Variation. Severe rainfall and storms events as a result of Climate Change could adversely impact Fingal, leading to water shortages, residential flooding and disruption and damage to infrastructure.

The Draft Variation will need to factor in the Climate Change strategy and mitigation measures to ensure future operations can progress unimpeded. Existing climate change issues / pressures issues for environmental aspects include:

- **Policy** - need to incorporated and implement strategic goals from higher level plans and programmes.
- **Biodiversity** - direct and indirect impacts from flooding, temperature changes, sea level rise, etc.
- **Population** - population growth and the need for transportation and transport networks, energy, housing and waste disposal.
- **Population -** the threat of extreme weather events (storms / cold spells / heat waves), sea level rise and pluvial and fluvial flooding.
- **Flooding** - direct and indirect impacts from flooding with impacts for populations, development, etc.
- **Air emissions** - associated with the burning of fossil fuels to heat homes / buildings, emissions from the construction industry and industrial activities.
- **Air emissions** - associated with the high use of the private car.
- **Land use changes** - the loss / damage of soil / land from the construction of sites for development.

6.7 Cultural Heritage

6.7.1 Introduction

The physical traces left in the landscape by previous generations in archaeological monuments and sites and in historic buildings, townscapes and vernacular structures forms part of the tangible cultural heritage linking the past and present.

Fingal has a rich archaeological and architectural heritage ranging from historic farmhouses and buildings, cottages and Martello towers to demesne houses and their designated landscapes. Archaeological conservation in Ireland is dealt with by the National Monuments Service of the Department of Arts, Heritage and Gaeltacht (DAHG) operating under the National Monuments Acts, 1930 - 2004, with two sections, the Archaeological Survey of Ireland and the Archaeological Archive being the primary producers and managers of data.

Archaeological Heritage refers to sites, monuments and complexes imprinted in the landscape and area protected under the national monuments Act 1930-2004.

Architectural Heritage refers historic or modern buildings of architectural, technological or social importance.

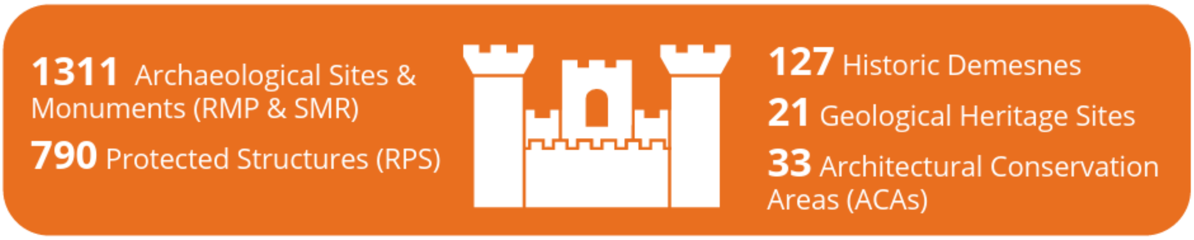
6.7.1.1 Fingal Heritage Plan 2024-2030

The Heritage Plan is a strategic framework for protection, management and promotion of heritage in Fingal and sets out a series of themes and actions for implementation. The Plan sets out six strategic objectives and themes around which we will focus our efforts for the next six years, with corresponding actions and desired outcomes for each. These themes were arrived at following a review of implementation of the previous heritage plan, and a process of consultation. The plan is focussed on inputs from the Fingal Heritage Forum, other relevant agencies, and the community in relation to priorities and key themes that should be addressed.

The six themes are:

- Protecting our Place
- Sharing our Stories
- Climate Action for Heritage
- All our Voices
- Creating Knowledge
- Accessible Heritage

There are currently 1311 known archaeological sites and 790 protected structures that encompass the story of the people of Fingal from churches and castles to Martello Towers and windmills, mounds, sub-surfaces sites, graveyards and burials, mill races and shipwrecks.



Many of the objectives in the Fingal Development Plan relating to the Record of Monuments and Places, the Record of Protected Structures, Architectural Conservation Areas, Designed Landscapes and Historic Building Stock are achieved through the on-going day-to-day Development Management process, specifically engaging in preplanning consultations, assessment of planning applications and issuing Section 57 Declarations. Statements of Character for the three new Architectural Conservation Areas – Balbriggan Historic Core, Old Portmarnock (Drumnigh Road) and Sutton Cross and Environs have been prepared.

6.7.2 Archaeological Heritage

Archaeological heritage is a non-renewable resource which helps us to understand how cultures and past societies developed. It consists of material remains in the form of sites and monuments, as well as artefacts or moveable objects. **'Monuments'** refer to manmade structures or natural features altered by man while 'sites' are normally situated below ground and may have no visible surface features at all. The archaeological heritage of an area includes structures, constructions, groups of buildings, developed sites, moveable objects, monuments of other types as well as their context, whether situated on or under land or water.

The National Monuments Acts 1930-2004 provide for the protection of archaeological heritage. At present, a monument is protected in one of four ways:

- It is recorded in the Record of Monuments and Places (RMP).
- It is registered in the Register of Historic Monuments (RHM).

- It is a national monument subject to a preservation order (or temporary preservation order).
- It is a national monument in the ownership or guardianship of the Minister for Culture, Heritage and the Gaeltacht or a Local Authority.

Different levels of protection apply to a monument depending on which of the four categories it falls under.

Archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts. The **Record of Monuments and Places** (RMP) is an inventory, was established under Section 12 of the National Monuments (Amendment) Act 1994 and structures, features, objects or sites listed in this Record are known as Recorded Monuments.

Overall, there are currently 1,070 known archaeological sites and monuments in Fingal. The wealth of archaeological sites ranges from cairns and passage graves to medieval churches and castles.

The towns of Swords, Balrothery and Lusk are of particular archaeological significance with very important medieval structures surviving intact above ground and the potential of archaeological finds below ground. These towns have zones of archaeological potential delineated by the National Monuments Section of the DEHLG[72] around their cores to protect their significant archaeological heritage.

Nationally, there are over 1,000 monuments in State care. Of these six monuments are located in Fingal. These are:

- Baldongan Church and Tower.
- Balrothery Church Tower.
- Dunsoghly Castle.
- St Mary's Church / Abbey in Howth.
- Lusk Round Tower.
- Swords Castle.

Other areas of archaeological potential include prehistoric monuments and sites, church sites, burial ground, holy wells and medieval structures.

6.7.3 Architectural Heritage

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

Fingal has a diverse building stock ranging from farmsteads, small cottages and large country houses to the architecture of a capital city, including an international airport, large shopping centres and modern office blocks. Most people identify the large estates of Luttrellstown, Newbridge, Ardgillan and Malahide as being of significant architectural merit, but more modest and functional structures also form part of the architectural heritage of the county. This includes lighthouses; the 19th century railway stations; the Martello towers; holy wells; milestones; water-pumps and individual thatched buildings.

6.7.3.1 Record of Protected Structures

Section 10 of the Planning & Development Act 2000 (as amended) places an obligation on all Local Authorities to include in their Development Plan objectives for the protection of structures, or parts of

[72] Department of Environment, Heritage and Local Government

structures, which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. These buildings and structures are compiled on a register known as the **Record of Protected Structures** (RPS). A Protected Structure, unless otherwise stated in the RPS, includes:

- the interior of the structure;
- the land lying within its curtilage;
- any other structures within the curtilage, and their interiors; and
- all fixtures and features which form part of the interior or exterior of any of these structures.

Owners or occupiers of a protected structure may request the Council to issue a declaration as to the type of works, which may or may not be permitted in their structure. There are 790 no. structures listed on the RPS. The statutory protection afforded by this designation is considered to offer a high level of protection to the exterior of these structures, which is the primary area of interest, while offering more flexibility to owners and occupiers, particularly in relation to the carrying out of works to the interior of the structures. Where a structure is protected under the RPS, the protection includes (unless otherwise stated) the structure, its interior and the land within its curtilage and other structures within that curtilage (including their interiors) and all fixtures and features which form part of the interior or exterior of all these structures.

Fingal has designated 33 no. **Architectural Conservation Areas** (ACA), indicating the locations where many clusters of protected structures were to be found. An ACA is a place, area or group of structures or townscape that is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. It should be noted that not all buildings or structures within an ACA are contained within the RPS. The ACAs also offer protection to surrounding structures which combine to create a specific character, street pattern or layout, which is worthy of recognition. The ACA's are listed in **Table 6.6** below.

Table 6.6 Architectural Conservation Areas in Fingal

Architectural Conservation Areas	
Abbeville Demesne	Ardgillan Demesne
Balbriggan No's 14 to 28 Hampton Street (even numbers only)	Balbriggan Historic Town Core
Baldoyle	Balrothery
Balscadden	Castleknock
Donabate - Newbridge House, Demesne & the Square	Garristown
Howth Castle Demesne	Howth Historic Core
Howth - Nashville Road and Park	Howth - St Nessans, St Peter's Seaview Terrace and The Haggard
Lusk	Luttrellstown Demesne
Malahide Castle Demesne	Malahide Historic Core
Malahide - The Bawn, Parnell Cottages and St Sylvester's Villas	Malahide the Rise

Architectural Conservation Areas	
Milverton Demesne	Naul
Portrane - Grey Square	Portrane - Red Square
Portrane - St Ita's Hospital Complex	Old Portmarnock (Drimnigh Road)
Oldtown	Rowlestown
Skerries	Sutton Cross and Environs
Sutton - No's 20a to 26 Strand Road	Sutton - Martello Terrace, Strand Road
Swords Church Road Historic Ecclesiastical Core	-

6.7.4 Other Heritage Areas in Fingal

6.7.4.1 Industrial Heritage

'*Industrial Heritage'* refers to everything from the extraction of raw materials, manufacturing and processing into usable forms or finished products, public utilities, transport, communications and energy production. Over the past number of years there has been a growing public awareness of Ireland's industrial heritage, and a number of sites have been restored and are now open to the public as tourist and educational attractions.

Fingal contains a rich heritage of fishing, transport network, industrial buildings and features and structures associated with extractive industries such as quarries and lime kilns. Some of the industrial heritage sites in Fingal include Skerries Windmill complex, remains of a lime kiln in Malahide Castle Demesne and the copper mines north of Loughshinny. The presence of a passage tomb, cists and a midden on a small promontory north of Rush village bears out the archaeological potential of this stretch of coastline and it is likely that further evidence of human activity survives along the coast and its environs.

A desktop survey of the industrial heritage in Fingal was carried out in 2011. Overall 1,159 sites were identified during the First Phase of the Fingal Industrial Heritage Survey, comprising a range of industrial sites[73]. Analysis of the findings of the survey of the industrial heritage of Fingal shows transport to be the most dominant of the classification categories, with bridges being the most numerous site type.

6.7.4.2 Maritime and Underwater Archaeology

Maritime archaeology explores the way that people lived and worked by the coast. Ireland's maritime landscapes include ancient settlements along the coast and islands, piers, harbours, fish traps and shipwrecks and submerged landscapes on the seabed. Threats to maritime archaeology include climate change, sea-level rise, coastal erosion, fishing and shellfish farming, coastal and offshore development. Such activities can lead to the damage or destruction of underwater archaeological sites.

Section 3 of the National Monuments (Amendment) Act 1987 makes specific provisions for the protection of shipwrecks and underwater archaeological objects. The Shipwreck Inventory of Ireland includes all known wrecks for the years up to and including 1945. There are currently over 10,000 entries on the Inventory.

[73] FCC (2011).

Fingal's rivers and tidal estuaries may contain such objects and any development within these areas should take into consideration the potential for archaeological discoveries. A number of these shipwrecks are present in the coastal waters around Fingal; named shipwrecks include: Bydand, County of Lancaster, Flying Dart, HMD Deliverer, Marlay, MFV Benaiah, Queen Victoria, RMS Taylor and the SS Polwell.

6.7.5 Existing Cultural Heritage Issues

Construction activities have the potential for direct negative impacts on heritage features and their setting. Development of infrastructure, in addition to development resulting from economic growth and increasing population, can potentially impact on the integrity of sites or features of architectural, archaeological or cultural heritage interest.

Implementation of the Variation also provides the opportunity to potentially uncover new heritage features and enhance public awareness of and access to these sites.

Existing cultural heritage issues / pressures with environmental considerations include:

- Development of infrastructure - resulting from economic growth and increasing population, may impact on the integrity of sites or features and their views to / from architectural, archaeological or cultural heritage interest.
- Development - in close proximity to sites and areas of cultural heritage may adversely impact upon the cultural landscape setting.
- Development - can adversely impact on community's sense of place.
- Development - development has the potential to impact archaeological heritage which is sub-surface. This includes the insertion of services (e.g. playgrounds), landscaping works, ground levelling and tree planting.
- Architecture - impact on heritage streetscapes of regional and local importance.
- Archaeology - impact on archaeological monuments and their settings including undiscovered sites / features.
- Landscapes - there is a need to identify and protect culturally important landscapes.
- Tourism - demand for development in areas of tourism and along the coastline including holiday accommodation, can potentially impact cultural heritage sites and features.
- Climate change - the direct effects of climate change on heritage may be immediate or cumulative. Potential impacts are flooding, storm damage, coastal erosion, soil movement, changing burial-preservation conditions, pest and mould and maladaptation.
- Awareness - increasing public awareness of the cultural value and social and economic significance of the county's built heritage.

6.8 Landscape and Visual

6.8.1 Introduction

The concept of landscape encompasses all that can be seen by looking across an area of land, *i.e.* it is the visible environment in its entirety. Landscape is the context in which all change takes place and helps to create a unique sense of place or identity within an area. The landscape supports a wide range of ecological habitats despite growth in its resident population. The interaction of all of these elements influences landscape character for future generations.

The landscape of Fingal is rich and varied, ranging from tranquil villages in rolling country landscape, picturesque seaside villages and rugged coastline to vibrant urban developments and historic towns. Fingal has been changing quite rapidly as a result of high levels of development to meet a growing population. The challenge that is faced is to manage the landscapes so that change is positive in its effects, so that the landscapes that are valued are protected and those that have been degraded are enhanced.

6.8.2 Legislation / Policy / Guidance

The *European Landscape Convention*, also known as the Florence Convention, promotes the protection, management and planning of European landscapes and organises European co-operation on landscape issues. The convention was adopted on 20 October 2000 in Florence (Italy) and came into force on 1 March 2004[74].

The *National Planning Framework, Project Ireland* 2040 outlines that Ireland's landscape has a wealth of natural and cultural assets which support our quality of life. Therefore the protection, management and planning of the landscape is also interconnected with the National Landscape Strategy for Ireland, and a national landscape character assessment, will provide consistency in how we characterise and connect with the landscape. The *National Policy Objective 61* is:

"Facilitate landscape protection, management and change through the preparation of a National Landscape Character Map and development of guidance on local landscape character assessments, (including historic landscape characterisation) to ensure a consistent approach to landscape character assessment, particularly across planning and administrative boundaries".

A *National Landscape Strategy for Ireland 2015-2025*[75] was published, in line with Ireland's obligations under the European Landscape Convention. The key objectives of this Strategy are the recognition of landscape in law and the provision of a policy framework to put measures in place for the management and protection of landscape and the production of a national Landscape Character Assessment (LCA).

6.8.3 Landscape Character Assessment / Areas / Types

Landscape Character Assessment (LCA) is a process that describes maps and classifies landscapes. Landscape character is defined as *'a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse'*.

LCA identifies areas of common character called landscape character areas or landscape character units (LCU). A LCU has a distinct, recognisable and consistent pattern of elements that makes it different from its neighbouring landscape.

The objective of a LCA is to analyse the character, value, and sensitivity of landscapes identified within a particular area. By understanding how different landscapes developed and evolved from both a natural and social perspective, decisions relating to the management and planning of the landscape can be made from an informed basis. The LCA for Fingal divides the county into 6 Landscape Character Types (LCT) with landscape values and sensitivity as follows: (refer to Figure 6.14).

[74] Council of Europe
[75] DAHG (2015).

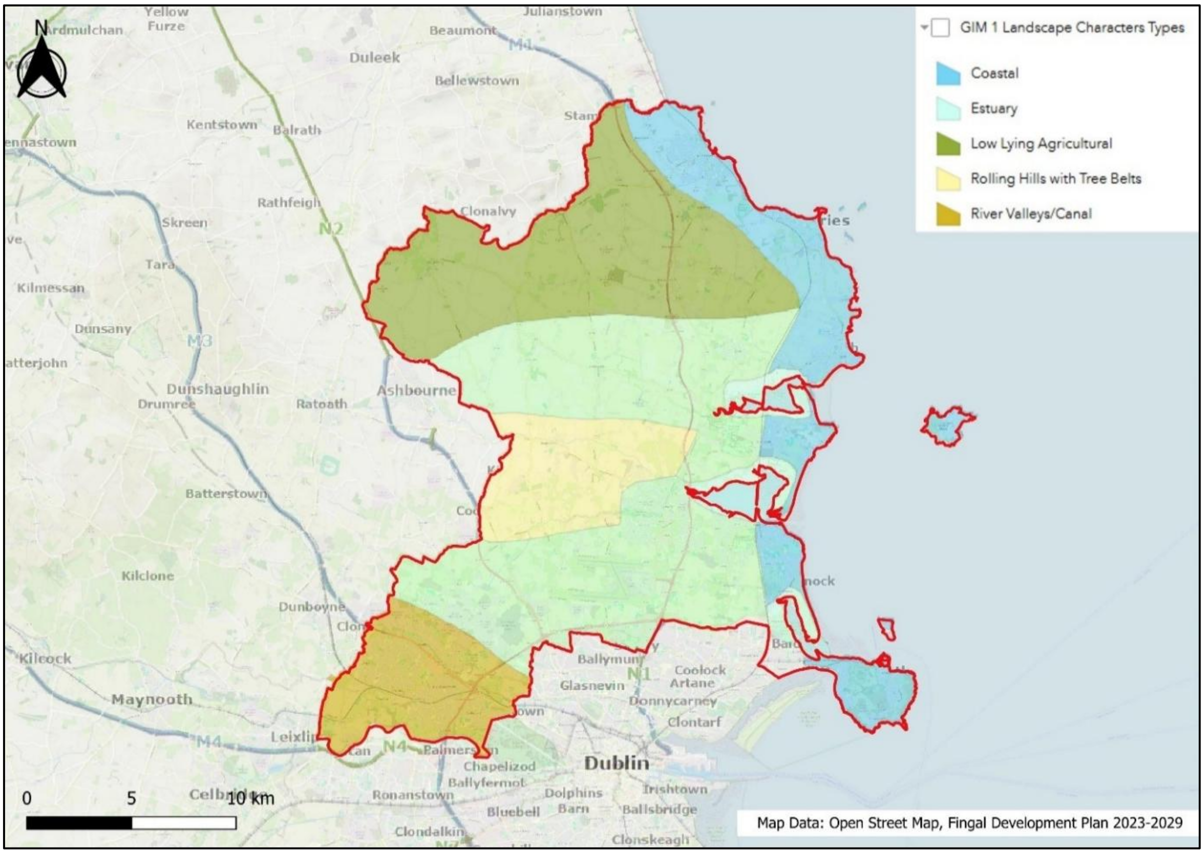
Figure 6.14 Landscape Character Types (LCT) with landscape values and sensitivity

Landscape Character Types	Landscape Value	Landscape Sensitivity
Rolling Hills Type	Modest	Medium
High Lying Type	High	High
Low Lying Type	Modest	Low
Estuary Type	Exceptional	High
Coastal Type	Exceptional	High
River Valley and Canal Type	High	High

- Rolling Hills Character Type - made up principally of agricultural land and is of value due to the Ward and Broadmeadow River and the ecological and visual attributes they bring. The protected views (R108 (St Margaret's to Naul road) and R125 (Swords to Ashbourne Road), tree belts and undulating lands also add value to the area. An important quality is the archaeological heritage in Swords.
- High Lying Character Type - categorised as having a high value, its importance highlighted by the High Amenity zoning covering substantial parts of the area. This is an area of upland, rising to a high point of 176 metres at Hillfort Mound, to the southeast of the Naul. These hills afford panoramic views of the Mourne Mountains to the north, the coastline to the east and the Wicklow Mountains to the south. There are a number of important visual ridges on these uplands, that can be seen from wide areas of Fingal and Meath.
- Low Lying Character Type - has an open character combined with large field patterns, few tree belts and low roadside hedges. The main settlements located within the area include Oldtown, Ballyboghil and Lusk and parts of Malahide and Donabate. Dublin Airport is located in this area. This low-lying area is dominated by agriculture and a number of settlements
- Estuary Character Type - is categorised as having an exceptional value, recognised by the EU designations (candidate Special Areas of Conservation and Special Protection Areas) that apply to each in addition to national designations such as proposed Natural Heritage Areas and Ramsar. Estuary Character consists of the three large sand spits which have created protected estuarine and saltmarsh habitats of great ornithological and ecological interest at Rogerstown, Swords/ Malahide and Baldoyle. The flat horizontal nature of estuaries means that views are generally contained within the low hills and dunes that enclose these areas. There are some groups of trees to the edges of the estuary zones especially to the north side of the Swords/Malahide estuary. The character of these zones can alter depending on the tidal condition. The aesthetic quality of the estuaries is also outstanding
- Coastal Character Type - is categorised as having an exceptional landscape value. The type forms the eastern boundary of the County and contains a number of important beaches, islands and headlands that together create a landscape of high amenity and landscape value. A number of important settlements are located within this area, including Balbriggan, Skerries, Rush, Malahide, Portmarnock and Howth. The land is generally low lying, with the exception of some prominent headlands and hills in the northern part of the area, Howth and the offshore islands. Most of the Howth peninsula is covered by the 1999 Special Amenity Area Order (SAAO).
- River Valleys and Canal Character Type - The Tolka and Liffey valleys together with the Royal Canal Corridor are the main landscape features in this area. The Tolka and Liffey valleys are characterised by areas of grassland along meandering river valleys which, especially in the case of the Liffey, are well wooded at the edge of the floodplain and along the valley slopes. Areas of both valleys support recreational facilities along their corridors. A number of institutional and

private demesnes along the valley edges maintain a rural and wooded character to the areas. However, housing estates are beginning to encroach into corridor areas. In recognition of the special amenity value of this area a Special Amenity Area Order (SAAO) was made for the Liffey Valley between Lucan and Chapelizod in 1990.

Figure 6.15 Landscape Character Areas[76]



6.8.3.1 High Amenity Zones and Sensitive Landscapes

A High Amenity Zoning has been applied to areas of the county of high landscape value. These are areas that consist of landscapes of special value or sensitivity in which inappropriate development would contribute to a significant diminution of landscape amenity in Fingal. High amenity landscapes include the coastal zone, river valley areas (Liffey, Delvin, Ward and Tolka) and the Naul Hills area.

Significant portions of the coastline, and a number of islands in Fingal, are visually sensitive as evidenced by the many protected views and prospects, high amenity zonings and areas of exceptional landscape value which are highly sensitive to development. The islands in Fingal are Lambay Island, Ireland's Eye, Shenick's Island, Colt Island, St. Patrick's Island and Rockabill Island. Lambay Island is the only inhabited island. All of the islands are zoned as High Amenity Areas and they are all designated nature conservation sites of national or international importance. There still remain stretches of the coastline which are undeveloped, remote and peaceful.

The areas adjacent to the High Amenity areas are also sensitive landscapes as development in these areas may affect directly or indirectly the quality of the High Amenity areas. These have some of the qualities of the High Amenity Zone but to a lesser degree. They are support areas to the High Amenity Areas in which development is difficult to integrate. In some cases they have been identified because

[76] FCC (2023). *Fingal Development Plan Viewer.*

inappropriate development in these areas may have a detrimental effect on the landscape quality of the High Amenity Areas, and thus the county as a whole.

6.8.4 Protected Views & Prospects

The importance of landscape and visual amenity and the role of planning in its protection are recognised in the Planning and Development Act 2000 (as amended), which requires that Development Plans include objectives for the preservation of the character of the landscape, including the preservation of views and prospects and the amenities of places and features of natural beauty or interest. Within the Fingal a number of views and prospects are protected as set out on the Green Infrastructure and Zoning Maps provided with the Fingal Development Plan 2023-2029.

6.8.5 Habitat and Landscape Features of Importance for Biodiversity

Many important and significant biodiversity areas occur outside sites that are subject to legal protection under EU and National legislations. There are many habitats and important features that are of particular importance for biodiversity throughout Ireland, including Fingal. Such areas include, hedgerows, woodlands and other field boundary types such as stone walls and ditches, rivers, streams and riparian zones, canals and wetlands. It is important that these areas are protected and enhanced where possible, as these landscape features and habitats cannot be sustained in isolation from one another as they provide ecological 'corridors' that support the movements of species necessary to maintain biodiversity.

Fingal has many areas of high quality landscape especially along the coast, the river valleys and the area around the Naul Hills in the north of the county.

6.8.6 Existing Landscape and Visual Issues

Landscape can be considered a dynamic rather than static asset. It is constantly changing, and its changes are driven by nature itself, by direct human intervention, and indirectly through the consequences of human activity, notably climate change. All physical development undertaken by human impacts on the landscape. At the same time, human activity, especially farming, does much to maintain the landscape.

Areas of a highly sensitive landscape have a low capacity to absorb new development and this can be a challenge to locate new development in these areas without it becoming unduly obtrusive. The Plan should seek to conserve and enhance natural habitats and ecosystems to protect and improve biodiversity.

Existing landscape and visual issues / pressures with environmental considerations include:

- Development - development and housing are having adverse and visual impacts on the landscape.
- Housing - visual impact with greatest pressure for expansion of settlements.
- Green Infrastructure - protecting the existing green infrastructure network from fragmentation and loss due to pressures of urban development within and adjoining the network.
- Ecosystem Services - recognising and promoting the value of ecosystem services that the green infrastructure network provides to the county.
- Agriculture / forestry - agricultural practices and expansion in lowlands and large scale forestry development in uplands.
- Quarrying - impact of operations on the landscape.
- Coastal - wind developments are having visual impacts on the coastline.
- Coastal - coastal areas experiencing greater pressure for tourism and residential development - second homes and holiday homes.

6.9 Material Assets

6.9.1 Introduction

Material assets are resources that are valued and intrinsic to a development and the surrounding area. Material assets may be of either natural or human origin and the value may arise for economic or cultural reasons. Material assets include water supply, wastewater treatment infrastructure, waste disposal including recycling, transport infrastructure (road, rail, airports and ports), energy and supply networks and telecom services. Material assets also includes economic assets such as coastal and water resources which support fisheries and aquaculture.

The sustainable growth of Fingal is dependent on the provision of services and infrastructure. A Plan led approach, in accordance with the county's Core Settlement and Housing Strategy is required for the delivery of such services in order to ensure there is adequate capacity to support the future development of Fingal.

6.9.2 Water Services

6.9.2.1 Water Supply and Water Services

The sustainable growth of the County is dependent on the provision of services and infrastructure. A Plan led approach, in accordance with the County's Core Settlement and Housing Strategy is required for the delivery of such services in order to ensure there is adequate capacity to support the future development of the County.

There have been significant changes in responsibilities for water supply and wastewater treatment services. As of January 2014, Uisce Éireann (formerly known as Irish Water) replaced local authorities as a single provider of water supply and wastewater services. Uisce Éireann have prepared the Water Services Strategic Plan (WSSP), '*A Plan for the Future of Water Services*' and it provides for the first time at national level an opportunity to consider the way water services are delivered in Ireland. The WSSP sets out strategic objectives for the delivery of water services up to 2040.

Uisce Éireann is responsible for providing and developing public water services; and ensuring drinking water quality meets the standards in the Drinking Water Regulations. The EPA is the drinking water quality regulator, responsible for enforcing the Drinking Water Regulations. Private bored wells used as a source of water supply to single dwellings are the responsibility of the householder and are therefore not regulated and Uisce Éireann has no regulatory function in this regard.

The latest *Drinking Water Quality in Public Supplies 2024*[77] was published by the EPA in 2025. The report outlines the most important issues which should be addressed on a national level, to protect and improve public drinking water supplies.

Practical water conservation measures including active leakage detection, demand management and pressure management played and will continue to play a major role in reducing the demand for potable water, thus facilitating additional development and improving the level of service to existing consumers in the County through the existing watermain networks.

Irish Water have prepared the Water Services Strategic Plan (WSSP), '*A Plan for the Future of Water Services*' and it provides for the first time at national level an opportunity to consider the way water services are delivered in Ireland. The WSSP sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. The Plan details current and future challenges affecting the

[77] EPA Drinking Water Quality in Public Supplies 2024- https://www.epa.ie/publications/compliance--enforcement/drinking-water/annual-drinking-water-reports/drinking-water-quality-in-public-supplies-2024.php

provision of water services and identifies priorities to be dealt with over the short to medium term. The Plan is to be reviewed on a five-year basis. A new draft Water Services Strategic Plan 2050 is out for public consultation and sets out objectives and significant challenges likely to be faced over the next 25 years.

6.9.3 Wastewater Services

The Urban Wastewater Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) aims to protect the environment from the adverse effects of wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment. Such treatment is essential in order to meet the requirements of the WFD.

Fingal County Council (FCC) currently operates wastewater treatment plants at Swords, Malahide and Balbriggan. A plant at Portrane also serves this community as well as Donabate, Rush and Lusk. A number of smaller plants treat wastewater in the rural towns and villages. Wastewater from the south of the county including Howth, Baldoyle, Sutton, Portmarnock, Santry, Meakstown and Blanchardstown discharges to the Ringsend Waste Water Treatment Plant (WwTP) operated by Dublin City Council (DCC). Planning permissions for a major upgrade at Ringsend WwTP were granted in 2012 and 2019, respectively. The upgrade is currently underway and will facilitate the existing plant meeting future wastewater treatment requirements, which will allow for growth in both population and industry. The project is being delivered on a phased basis, and when works are complete in 2025, Ringsend will have the capacity to treat the wastewater for a population equivalent of 2.4 million while achieving the standards of the Urban Waste Water Treatment Directive.

The Greater Dublin Drainage (GDD) Project involves the development of a new regional wastewater treatment facility and associated infrastructure including pipelines to serve the Greater Dublin Area (GDA) and parts of the surrounding counties of Kildare and Meath. The GDD project is acknowledged as a critical piece of national infrastructure and has been identified in the National Planning Framework (NPF) as a National Strategic Outcome of the National Development Plan. The project will have the capacity to provide wastewater treatment for the equivalent of half a million people to support the needs of a growing population and economy in Dublin and the surrounding counties, whilst also contributing to system resilience and flexibility.

6.9.3.1 Surface Water Drainage

Surface water can be proactively managed through measures such as Sustainable Urban Drainage Systems (SuDS). SuDS can minimise the quantity and increase the quality of surface water runoff as well as mitigating adverse impacts of climate change.

SuDS such as green roofs, permeable paving and attenuation areas contribute towards slowing surface water run-off, thereby alleviating flooding and helping to clean the water before it reaches our rivers. This ‘green infrastructure approach’ has an increasing role to play in surface water management, reducing reliance on more traditional hard engineered solutions and contributing to flood management , climate action and measures to enable WFD compliance.

Fingal County Council (FCC) encourage and promote the use of green solutions such as swales, tree pits, green roofs, downpipe planters, ponds and wetlands for drainage. Above ground drainage solutions maximise the benefits in terms of water quality, flooding, biodiversity, amenity, climate change and maintenance amongst others.

6.9.4 Utilities

Gas and electricity are the energy utilities which have traditionally supported homes and businesses across Fingal.

ESB Networks and EirGrid are the utility providers responsible for the electricity distribution and transmission systems. EirGrid manages the higher capacity electricity network which supply's power to industry and businesses that use large amounts of energy and electricity, whilst the ESB manages and operates the distribution network supplying electricity to homes, businesses, schools and institutions.

The Dublin region is the major load centre on the Irish transmission system, accounting for approximately one third of total electricity demand. The Dublin Port hinterland and Poolbeg Peninsula is an electricity generation and transmission / distribution network hub.

EirGrid has a number of ongoing and planned projects in the Greater Dublin Area (GDA) for the purpose of reinforcing the transmission and distribution networks.

Gas Networks Ireland (GNI) are the utility provider responsible for the supply, transmission and distribution of natural gas. GNI operates and maintains a modern gas network in Fingal whilst Ervia is responsible for the delivery of gas infrastructure and services through GNI.

6.9.4.1 Public Lighting

Public lighting is an important component of placemaking and is essential for the operation of the city. While the city is generally an illuminated area, excessive light pollution can arise when external lighting is not properly designed or managed. Insensitive lighting can cause what is termed "light pollution". Light pollution is essentially wasted light. Fingal as a predominantly rural County is sensitive to light pollution through sky glow which can affect the tranquillity of the countryside. Light pollution can have a negative impact on biodiversity by affecting the normal diurnal patterns of plants and animals.

6.9.5 Energy

The Department of Communication, Climate Action and Environment (DCCAE) is responsible for the development of Ireland's energy and climate policies. Ireland's long-term energy policy framework is set out in the 2015 Energy White Paper, Ireland's Transition to a Low Carbon Energy Future 2015-2030. The Paper sets out a framework to guide Irish energy policy in the period up to 2030 and sets out a vision for a transformation of Ireland's energy systems. This includes:

- moving to lower emissions fuels and ultimately towards a lower reliance on fossil fuels;
- significantly increasing renewable generation;
- achieving a step change in energy efficiency performance;
- implementing smart and interconnected energy systems;
- strong regulatory structures and markets to underpin these changes; and
- repositioning energy consumers to have a more active role within the energy sector.

Ireland is committed to a range of renewable energy and efficiency targets. In 2014 the European Council adopted a new framework, the 2030 Climate and Energy Framework, which includes EU-wide targets and policy objectives for the period from 2021 to 2030. The 2030 framework proposes new targets and measures to make the EU's economy and energy system more competitive, secure and sustainable[78].

[78] European Council (2017).

The built environment accounted for 12.7% of Ireland's greenhouse gases in 2017. It is important that we improve the energy efficiency of our buildings, including our homes, workplaces and schools, by meeting higher energy performance standards and by increasing retrofit activity. This will reduce Ireland's dependence on fossil fuels, but will also improve our living standards by making our buildings healthier, safer, and less costly to heat.

The National Energy and Climate Plan (NECP) 2021-2030[79] takes into account energy and climate policies developed to date, demographic and economic growth (outlined in Project 2040) and includes all of the climate and energy measures set out in the National Development Plan (NDP) 2018-2027.

Consideration for renewable energy are provided under the following sectors:

- Renewable Energy Potential
- Wind Energy
- Hydro-Electric
- Solar
- Bioenergy
- Waste Energy - District Heating

6.9.6 Telecommunications

High-speed broadband and telecommunications is core to competitiveness. The National Broadband Plan 2020[80] (NBP) sets out the strategy to deliver high speed broadband throughout Ireland. Ireland has made significant progress in recent years in terms of broadband connectivity at all levels: international connectivity, backhaul networks, Metropolitan Area Networks (MANs) and local access networks. Since its publication, significant investment has been made in upgrading and modernising networks which support the provision of broadband and telecommunications services, with significant additional investment expected over the coming years. The '*Harnessing Digital – The Digital Ireland Framework'* (2022) is intended to assist Ireland in maximising the socio-economic benefits from the digitisation trend.

FCC recognises the essential need for high quality communications and information technology networks in assuring the competitiveness of the county's economy and its role in supporting development.

6.9.7 Transport

The maintenance and delivery of an efficient, integrated and coherent transport network in line with national and regional policy is essential to the future economic, social and physical development of the County. Land-use planning and transport planning are inextricably linked and their proper integration is a key determinant to sustainable development.

National Sustainable Mobility Policy Action Plan 2022-2025' is a national document which seeks to achieve a shift to more sustainable means of transport by setting actions and timeline for Modal Change. This policy sets out a strategic framework to 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions.

The Policy aims to improve the delivery of sustainable mobility by –

- *Implementing the accompanying action plan to 2025 and a reviewed and updated action plan for 2026 to 2030.*

[79] DCCAE (2019).
[80] DECC, 2020: https://www.gov.ie/en/publication/c1b0c9-national-broadband-plan/

- *Establishing a Leadership Group to oversee and drive implementation of the Policy and delivery of the action plan, and agree a programme of "pathfinder" projects at local level.*
- *Introducing a new annual National Household Travel Survey to measure progress against the Policy's targets.*
- *Convening a new National Sustainable Mobility Forum to provide a platform for collaborative engagement with national, regional and local stakeholders.*
- *Increasing public engagement around the benefits of sustainable mobility and raising awareness of the availability of alternative options to the private car.*
- *Establishing a new National Transport Authority Advisory Council to engage with the NTA around the discharge of its functions.*
- *Developing a transport research network to support existing research programmes and draw on the sustainable mobility expertise available across academia and industry, both in Ireland and internationally.*

6.9.7.1 Public Transport

Public transport is crucial for the county and the region as it has the greatest potential to move the highest volume of people, and the delivery of public transport infrastructure in co-operation with the relevant transport agencies continues to be of utmost importance.

There are a number of strategic projects in the Greater Dublin Area (GDA) Strategy 2022-2042 proposed for Fingal that have the potential over the coming years to have a transformative impact on travel by shifting the dominance of car-based transport towards public transport. Refer to Table 6.7.

Table 6.7 Public Transport Projects in Fingal

Public Transport Project	Project Description
Bus - BusConnects New Dublin Area Bus Network	The H-Spine includes routes connecting Dublin's north-east to the city centre covering the areas of Howth, Baldoyle, Donaghmede, Raheny, Malahide and Portmarnock
Bus - BusConnects Core Bus Corridor	BusConnects - a number of orbital routes are also proposed which will greatly improve ease of movement within the county and city. Proposed routes include: 1. Clongriffin to City Centre 2. Swords to City Centre 3. Ballymun to City Centre 4. Blanchardstown to City Centre.

Public Transport Project	Project Description
Rail - DART Expansion Programme	**DART+ Programme** when implemented will also facilitate improved access to / from Fingal and the region. Electrification and enhancements will apply to the following lines: • Northern Line • Maynooth / M3 Line • Kildare Line • South Eastern Line. **DART+ Coastal North** will deliver an increased and improved electrified network, with additional passenger capacity and enhanced train services between Drogheda in the north to Greystones in the south (covering c. 86km). Upon completion, DART+ Coastal Projects will see the extension of electrification of the line from Malahide to Drogheda with improvements along the existing DART line from Malahide / Howth to Greystones. **DART+ West** is seeking to modernise and optimise the existing railway between
Light Rail	The proposed **MetroLink** scheme is the development of a north-south urban railway service that will run between Estuary, north of Swords and Charlemont in south Dublin City Centre, connecting key destinations including Dublin Airport, Dublin City University, Mater Hospital and the City centre. **Luas to Finglas** - The extension of the Green Line Luas from Broombridge to Charlestown. The route will provide an additional 4km of track and will include four new Luas stops: St. Helena's, Finglas Village, Mellowes Park and Charlestown.

6.9.7.2 Roads

Fingal is well served by the national road network with the M1 Dublin to Belfast, the N2 / M2 Dublin to Monaghan / Derry, the N3 / M3 Dublin to Ballyshannon / Donegal, and the M50 all traversing the county.

Fingal is also serviced by a number of regional routes and local roads. These serve an important economic role and also have valuable social and community functions, often being the sole means of access for local economic activity. The county is very reliant on its road infrastructure for intra-and-inter-county movement and access.

Large new developments, especially commercial developments, generate additional car and HGV traffic. Additional issues include associated noise and air quality issues and a lack of connectivity within the county both for soft and hard transport methods.

6.9.7.3 Cycling and Walking Infrastructure

Cycling and walking is environmentally friendly, fuel-efficient and a healthy mode of transport to work, school, shopping and for recreational purposes. Cycling and walking are considered an efficient, fast and relatively inexpensive form of transport and its promotion is in line with the principles of sustainable development and promotion of healthy lifestyles.

The NTA's strategy for Transport in the GDA emphasises the need for additional walking and cycling infrastructure in the region and outlines a number of improvements required to encourage more people to walk which includes improvements to the existing environment for people with mobility, visual and hearing impairments.

Planning can encourage walking to become the principal method of movement for shorter journeys by utilising good urban design. Providing a network of safe, well-lit and convenient footpaths (both road-side and segregated) within new residential areas with links to schools, local neighbourhood centres, public transport stops and workplaces will encourage people to walk more.

FCC will continue to improve walking facilities in the County in conjunction with the NTA.

6.9.8 Dublin Airport

Dublin Airport is of strategic importance to national social and economic policy. Dublin Airport welcomed a total of 37 million passengers during 2025, setting a new record for traffic at the airport.

Fingal County Council is the competent authority for aircraft noise regulation at Dublin Airport under the Aircraft Noise (Dublin Airport) Regulation Act 2019. The Aircraft Noise Competent Authority (ANCA) was established by Fingal County Council in 2019.

6.9.9 Harbours and Marinas

Fingal has five harbours and two marinas. Howth is the main fishing harbour which caters to larger trawlers and has a marina. The other harbours at Balbriggan, Skerries, Rush and Loughshinny cater to smaller inshore fisheries used by a relatively low number of fishermen and are managed by the council.

6.9.10 Waste Management

Waste management in Ireland is regulated by the Waste Management Acts, 1996 (as amended), which require Local Authorities to prepare detailed plans for the management of waste. Under the Waste Management Acts, a Development Plan is deemed to include the objectives of the Waste Management Plan (WMP) for its area.

EU and National waste management policy can be summarised by the waste hierarchy of prevention, recycling, energy recovery and disposal. For the purposes of waste management planning, Ireland is now divided into three regions: Southern, Eastern-Midlands and Connacht-Ulster. The study area is located within the Eastern-Midlands region. The Regional Waste Management Planning Offices have issued the National Waste Management Plan for a Circular Economy (NWMPCE) 2024 - 2030 in March 2024, which supersedes the regional waste management plans. The NWMPCE does not however dissolve the three regional waste areas. The NWCPCE sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector.

The European Commission's Circular Economy Action Plan: A New Circular Economy Action Plan for a Cleaner More Competitive Europe, March 2020, forms one of the main blocks of the European Green Deal. A Waste Action Plan for a Circular Economy[81] was published in 2020 and outlines Ireland's National Waste Policy for 2020-2025.

The Council will continue to promote awareness of and promote an increase in the amount of waste that is re-used and recycled to reflect the objectives of the waste hierarchy.

Fingal operates two recycling centres, one at Estuary Road in Swords and one at Coolmine in Blanchardstown. These centres accept household waste only and among the items accepted free of charge include paper, glass bottles / jars, car and household batteries and Waste Electrical & Electronic Equipment (WEEE). There are a number of bring banks throughout the county, catering for bottles, cans and textiles.

[81] DCCAE (2020).

6.9.10.1 Fingal Litter Management Plan 2025-2028

The Fingal Litter Management Plan 2025-2028 sets out Fingal's objectives for preventing and managing litter in Fingal, and the implementation of the plan to meet those objectives. The plan is action-based and focuses on the prevention, enforcement and management of litter, with the objective of a consistently cleaner environment for the citizens of Fingal.

6.9.11 Green Infrastructure

Green and blue infrastructure plays an essential role in creating a more healthy and liveable county. These natural assets provide a platform for community activities, social interaction, recreation and physical activity, providing sustainable drainage solutions, facilitating biodiversity and wildlife habitats, carbon capture and creating connectivity.

6.9.12 Existing Material Assets Issues

Development arising from the Draft Variation will result in increasing demand for water, wastewater treatment, waste management, transport infrastructure / links and energy and telecommunications services. Existing material assets issues / pressures within and adjacent to the Fingal administrative area, include:

- Water Supply - ongoing issues with security of water supply in the Dublin and Mid-East Regions for existing users.
- Water Supply - on-going investment in water conservation / leak detection and fixing.
- Water Supply and Wastewater Services - new developments, (including housing, offices and retail development), will generate pressure on existing water and wastewater sources to meet demands.
- Wastewater Services - new developments, should only be permitted where there is adequate capacity in the wastewater infrastructure in accordance with urban wastewater treatment disposal requirements and standards. Currently, municipal wastewater discharges are creating significant pressure on the receiving waterbodies.
- Energy - reduction of reliance on fossil fuels, increased use of renewable energy resources
- Telecommunications - the rollout of connectivity in the urban environment can be complex. Lack of coordination between infrastructure and utility providers can lead to the spatially inefficient and uncoordinated provision of utilities and connectivity infrastructure.
- Transport - the movement of people is key to the success of new development and areas, where adequate transport infrastructure (*i.e*. road, rail, cycle and pedestrian routes) to these developments and accessibility throughout the development / area (safe footpath and cycle paths) is fundamental to the development of Fingal.
- Waste - population growth and development, and challenges in providing sustainable recycling infrastructure continues to put pressures on the local authorities to provide better waste management and access to waste services.
- Light Pollution - can arise when external lighting is not properly designed or managed which can in turn lead to inappropriate or excessive light spillage.
- Utilities - provision, protect and maintenance of adequate utilities to support existing and envisaged development.

7 Strategic Environmental Objectives (SEO)

The SEA Directive requires that *'the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.'*

A series of Strategic Environmental Objectives (SEOs) have been prepared in line with current guidance and also with specific reference to the SEA for the Variation No.1. The SEOs provide a basis for the assessment of the environmental effects of the Variation No.1 and are framed in such a manner as to enable the Variation to be fully assessed in environmental terms.

The scoping aspect of the SEA process affords an opportunity for consultees to provide input to the range and detail of the environmental objectives.

Table 7.1 Strategic Environmental Objectives (SEOs) for FDP Variation No.1

Theme	Objective
Biodiversity (Flora & Fauna) (B)	(B_1) Ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annex habitats and species and no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function.
	(B_2) Preserve, protect, maintain and where appropriate restore the terrestrial, aquatic and soil biodiversity, including internationally, EU and nationally designated sites and protected species.
	(B_3) Ensure the Variation No.1 does not contradict biodiversity protection, restoration and rehabilitation objectives in the Fingal Development Plan 2023-2029
Population & Human Health (PHH)	(PHH_1) Provide high quality residential, community, working and recreational environments with access to sustainable transport options.
	(PHH_2) Protect human health and well-being.
Land, Soils & Geology (SG)	(LSG_1) Safeguard land and soil resources from pollution and degradation.
Water Quality (W)	(WQ_1) Protect and where necessary improve and maintain water quality and the management of watercourses, groundwater and the marine environment, in compliance with the requirements of the WFD objectives and measures.
	(WQ_2) Implement and comply with the provisions of the Flood Risk Management and Sustainable Drainage Systems Guidelines to avoid inappropriate development in areas at risk of flooding.
Air Quality, Noise & Climate (AN)	(ANC_1) Maintain and promote continuing improvement in air quality and noise emissions through the reduction of emissions.
	(ANC_2) Contribute towards climate adaptation and mitigation and reduction of greenhouse gas emissions in line with National targets, including Ireland's commitment to realising a climate neutral economy by 2050.
Material Assets (MA)	(MA_1) Make best use of existing infrastructure, contribute towards the protection of public assets and infrastructure and promote the sustainable development of new infrastructure to meet the needs of the county's and Fingal's population. Ensure new developments are served with adequate and appropriate critical infrastructure with sufficient capacity (drinking water, wastewater, waste and transport) that does not present a danger to human health.
	(MA_2) Promote sustainable waste management, minimisation and recovery

Theme	Objective
	(MA_3) Promote sustainable transportation including increased use of public transport and active travel measures.
Cultural Heritage (CH)	**(CH_1)** Protect, conserve and avoid impact on places, features and landscapes of cultural and archaeological importance, including entries to the Record of Monuments and Places (RMP) and Sites and Monuments Record (SMR).
	(CH_2) Protect, conserve and avoid impact on places, features, buildings and landscapes of architectural heritage, (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Landscape & Visual (LV)	**(LV_1)** Protect and maintain the special qualities of the landscape character including coastal character within Fingal, minimise the loss of historic landscape features such as mature trees and hedgerows and scenic views.
	(LV_2) Avoid impacts on the statutory landscape & visual designations as identified in the Fingal Development Plan 2023-2029.

7.1 Strategic Environmental Indicators and Targets

The overall purpose of environmental indicators in SEA is to provide a way of measuring the environmental effect of implementing the Variation No.1. Indicators are also used to track the progress in achieving the targets set in SEA as well as the Variation No.1.

SEA Indicators and Targets are identified as part of the SEA process. While these have regard to the existing indicators and targets proposed in the adopted FDP 2023-2029, any target that is set must be attributable to the implementation of the Variation No.1 to the FDP.

8 Assessment of Alternatives

The SEA process requires the consideration of '*reasonable alternatives'* in terms of possible approaches available in the delivery of the Variation to the Plan. Alternatives should represent a range of different approaches within the statutory and operational requirements of the particular plan.

The strategy options available to the local authority are discussed in the formulation of the Draft Variation and assessed against the SEA Strategic Environmental Objectives (SEOs) in order to evaluate their overall potential environmental impact. A discussion of the merits or otherwise of each option will be provided in the Environmental Report and the reasons for the chosen option will be discussed.

Alternatives must be reasonable, realistic and capable of implementation and should represent a range of different approaches within the statutory and operational requirements of the Variation and the Plan. It should be noted that the position of the 'Plan' within the plan hierarchy under the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region significantly pre-determines the scope of the reasonable and realistic strategic alternatives. The content of the Variation and any alternatives derived are also predetermined by relevant sections of the PDA 2000.

In developing alternatives, the '*do-nothing'* approach is not considered to be a realistic option due to the statutory requirement to vary the Development Plan, taking account of key national and regional guidelines and strategies.

Developing combinations incorporating the key elements of the Development Plan, *i.e*. the plan framework, plan structure and settlement strategy to include zoning shall provide the foundation for the formulation of alternatives at the next stage of the SEA process in the environmental report. As stated, any alternatives considered will take account of national and regional policy objectives *e.g*. the requirement for compact growth, sustainable development and the climate adaptation.

Each alternative will be assessed for possible significant effects on the environment. The alternatives will then be graded to determine which has the least amount of impact. It should be noted that the SEA is not a decision-making tool but a decision informing tool and where alternatives with negative environmental effects are selected for other reasons (*e.g*. cost, policy drivers or public need), the SEA has an important role in identifying mitigation measures to avoid or reduce these effects

A Settlement Capacity Audit has been carried out by Fingal County Council (Appendix 4 to the Draft Variation), as required by the Development Plan Guidelines (2022) and Section 2.4 of the NPF Implementation: Housing Growth Requirements Guidelines (2025). The Settlement Capacity Audit reviews and summarises the capacity of existing residential zoned lands under the adopted Fingal Development Plan, based on detailed review of zoned lands in each settlement of the Settlement Hierarchy. The Settlement Capacity Audit has assisted in assessing and identifying the requirement for additional housing land and has provided the data for the estimation of potential residential capacity.

A detailed review of zoned lands in the County has been undertaken, including in each settlement identified by the Development Plan. This exercise has used the Council's GIS system, making use of an extensive database of lands across the County. This exercise collated potential sites via GIS and assessed and categorised sites based on development activity and planning criteria.

Under Section 4.5.2 of the Development Plan Guidelines, Settlement Capacity Audits should assess sites based on whether they have access to water, wastewater, surface water drains, roads, footpaths and public lighting.

These criteria are also used to identify lands within the scope of the Residential Zoned Land Tax (RZLT). Local authorities are responsible for identifying lands within the scope of the RZLT and publishing a map of all lands in scope. Lands within the scope of RZLT comprise lands that are:

- Zoned for residential development, or a mixture of uses including residential;
- Serviced or with access to infrastructure including water, wastewater, surface water drains, roads, footpaths and public lighting; and,
- Not affected by contamination, significant archaeological remains, or other physical conditions which would preclude development.

The RZLT also excludes lands which are already used for commercial trades or professions servicing existing communities, for a mix of uses, or for public services, community facilities, transport, energy, telecoms, water/wastewater, waste management, and sports and recreation, or subject to a statutory designation precluding development.

Local authorities therefore must remove lands from the scope of the RZLT where they are not serviced and available for infrastructure. The definition of lands outside the scope of the RZLT overlaps with the requirements of the NPF and the Development Plan Guidelines.

Fingal County Council has mapped all lands within the scope of the RZLT in 2025, in accordance with the Residential Zoned Land Tax Guidelines. This process has categorised lands based on whether they are serviced and potentially available for residential development. The 2025 RZLT map therefore allows for the identification of lands that are zoned for residential or mixed use but are not likely to be brought forward for development within the lifetime of the current Development Plan. As the RZLT lands within scope in 2025 are mapped, they have been incorporated into the Settlement Capacity Audit exercise and are used as a means of identifying land that is not immediately available for development in the short term.

General housing density assumptions have been applied across the lands identified, to estimate the potential number of homes that could be provided. For the purpose of this exercise, a density assumption of 50 homes per hectare has been applied for all residential zonings with the exception of RV 'Rural Village,' for which a density assumption of 20 homes per hectare has been applied due to its rural nature. These densities are in line with the ranges set out in the Sustainable Residential Development and Compact Settlements Guidelines. These are high-level assumptions across all sites and densities would vary greatly at the level of individual sites based on location and site characteristics. These are therefore reasonable mid-level assumptions and a reasonable approach for estimating capacity.

It should be noted that this exercise cannot account for all possible infill sites within existing built-up areas, or all sites that are already in active residential or other use, but which could feasibly be redeveloped at a greater density for residential or mixed use. The Development Plan provides policy support for infill housing on corner or infill garden sites and the densification of existing residential or town centre areas; however, it is not possible to identify every potential garden/small infill site, and delivery on such sites would be additional to this capacity identified.

Therefore, it is considered that the given the statutory, hierarchal, and infrastructural capacity constraints, the planning authority has had appropriate regard to potential alternatives and that the approach selected has had regard to environmental factors and to avoiding or minimising adverse effects on the environment.

9 Assessment of Effects of the Variation No. 1

9.1 Introduction

Fingal County Council has reviewed the Core Strategy of the Fingal Development Plan 2023-2029 (FDP) and in order to ensure consistency with the Revised NPF and NPF Implementation: Housing Growth Requirements Guidelines, Variation No.1 is proposed.

In order to maintain a robust supply of residential zoned land for development, it is recommended to provide for lands sufficient for approximately 5,000 new units, through the following measures:

- To vary the Fingal Development Plan 2023-2029 to provide for lands sufficient for approximately 5,000 new units, with the following amendments recommended:
    - To vary the Fingal Development Plan 2023-2029 to zone for approximately 2,500 residential units on additional residential-zoned land, in order to provide in part for the additional housing land supply necessary to meet Fingal County Council's new annual housing delivery requirement.
    - To vary the Fingal Development Plan to remove the 'Long-Term Strategic Reserve' designation for Dunsink and to provide that development in Dunsink will be in accordance with a forthcoming Local Area Plan for the area. This will provide a plan-led approach to the development of Dunsink and will facilitate the early release of the remainder of the additional housing land required for the County to 2029, with capacity for approximately 2,500 new units.
- To vary Fingal Development Plan to update Table 2.14 (the Core Strategy table) to reflect the new housing delivery requirement, to allocate this requirement across the settlement hierarchy, and to reflect updated zoned land allocations.
- To vary the Fingal Development Plan to incorporate a series of amendments to the text necessary to reflect the above changes and the adoption of the Revised National Planning Framework.
- To progress a statutory Local Area Plan for Dunsink in Q1 2026.

The rezonings proposed as part of the Variation No.1 include the following:

- Site 4.1 (c. 3.9 ha) on Sheet 4 – School Lane, Balrothery: rezone from 'GB' Green Belt to 'RA' Residential Area and amend development boundary accordingly
- Site 5.1 (c. 10.5 ha) on Sheet 5 – Holmpatrick, Skerries: rezone from 'GB' Green Belt and 'OS' Open Space to 'RA' Residential Area and amend development boundary accordingly
- Site 6A.1 (c. 3.6 ha) on Sheet 6A – Causetown, Lusk: rezone from 'OS' Open Space and 'RU' Rural to 'RA' Residential Area and amend development boundary accordingly
- Site 6A.2 (c. 5.7 ha) on Sheet 6A – Racecourse Road, Lusk: rezone from 'RU' Rural to 'RA' Residential Area and amend development boundary accordingly
- Site 9.1 (c. 6.4 ha) on Sheet 9 – Seamount, Malahide: rezone from 'RU' Rural To 'RA' Residential Area and inclusion of new Local Objective A - *Facilitate the provision of east/west and north/south linkages to ensure permeability within the area* and amend development boundary accordingly
- Site 9.2 (c. 10.8 ha) on Sheet 9 – Broomfield West, Malahide: rezone from 'GB' Green Belt To 'RA' Residential Area and amend development boundary accordingly
- Site 9.3 (c. 1.2 ha) on Sheet 9 – Greenwood, Kinsealy: rezone from 'GB' Green Belt to 'RV' Rural Village and amend development boundary accordingly

- Site 9.4 (c. 7.1 ha) on Sheet 9 – Kinsealy Lane, Kinsealy: rezone from 'GB' Green Belt To: 'RV' Rural Village and inclusion of new Local Objective B - *Facilitate the provision of north/south linkages to ensure pedestrian and active travel linkages within the area* and amend development boundary accordingly
- Site 9.5 (c. 2.7 ha) on Sheet 9 – Hole in the Wall Road: rezone from 'GB' Green Belt To: 'RA' Residential Area and amend development boundary accordingly
- Site 13.1 (c. 9.1 ha) on Sheet 13 – West of Barnhill: rezone from 'GB' Green Belt To: 'RA' Residential Area and amend development boundary accordingly
- Site 13.2 (c. 0.52 ha) on Sheet 13 – Clonsilla Road, Clonsilla: rezone from 'OS' Open Space To: 'RA' Residential Area and amend development boundary accordingly
- Site 13.3 (c. 435.9 ha) on Sheet 13 Strategic Land Reserve Designation: Replace Long Term Strategic Reserve designation with Local Area Plan designation

As part of Variation No.1, it is recommended that the Fingal Development Plan 2023-2029 be varied to remove the 'Long Term Strategic Reserve' designation from the Dunsink lands. It is also recommended that the text of relevant portions of the Development Plan be amended to reflect the new plan-led approach to Dunsink and to facilitate the early release of the remainder of the additional housing land required for the County to 2029. The statutory plan for entirety of the lands at Dunsink, a draft Local Area Plan, will be published in early 2026. This LAP will provide for the phasing of Dunsink lands, with the first phase to allow land for approximately 2,500 units and associated services/infrastructure to be progressed under the current Development Plan.

9.2 Environmental Assessment for Variation No.1

Under the Spatial Planning Hierarchy in Ireland, the Fingal Development Plan 2023-2029 (FDP) sits at the Local Government level and is below the Regional, National and International levels. The FDP influences plans at a lower level of plan hierarchy, including Local Area Plans and other area-specific plans such as Local Biodiversity Action Plan, Local Heritage Plan, Local Climate Action etc. The FDP was subject to Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA).

Variation No.1 to the Fingal Development Plan 2023-2029 proposes to update the FDP in order to ensure consistency with the Revised NPF and NPF Implementation: Housing Growth Requirements Guidelines. Under Section 10 of the Planning and Development Act 2000, the Core Strategy of the Fingal Development Plan must be consistent with the national and regional development objectives of the NPF.

Variation No.1 corrects and reflects revised and new circumstances that have emerged since the adoption of the Fingal Development Plan 2023-2029. The Variation No.1, once implemented, will provide for an increased supply for residential zoned lands and will align with the Government's overall revised National Planning Framework. The alignment of the FDP to these guidelines includes provisions to facilitate the plan-led and sustainable development of additional identified lands for new residential development in existing urban settlements to support increases in population growth, subject to local and environmental considerations. In this context, the proposed Variation No.1 contributes positively to the promotion of sustainable development. The assessment involves a review of the existing core strategy and settlement strategy with the associated identification of development potential and updated/additional zoning objectives where necessary to reflect the housing growth requirements.

Despite its positive intent, the Variation No.1 has the potential to give rise to effects on the receiving environment (SEOs) as summarised in **Table 9.1**, under the following scenarios:

- Any development works that could directly or indirectly affect water quality, flow and/or morphology and potentially affect the European sites, protected habitats and species;
- Any development works that could directly or indirectly increase risk of flooding and potentially affect the protected habitats and species;
- Any development works that could directly or indirectly affect groundwater quality or supply;
- Any risk of habitat loss, fragmentation or degradation to European sites or network supporting European sites, protected habitats and species;
- Any potential for a risk of direct or indirect disturbance to European site habitats and/or species, e.g. development along river corridors/coastal sites, noise disturbance due to construction, light pollution etc;
- Any development works that could risk a reduction in ecological connectivity between European sites and/or the ecological networks supporting them;
- Any development works that could risk a reduction in air quality or impact the existing noise or vibration environment;
- Any development works that could result in light pollution or have a landscape, or visual impact or an impact on heritage;
- Any development works could result in an increase in quantum of water supply, wastewater and waste generated;
- Any development works could result in an increase in traffic on the adjoining road network;
- Any development works that could result in risk of spread of invasive species.

Table 9.1 Assessment of Potential Effects of Draft Variation No.1 against Strategic Environmental Objectives (SEOs)

	Biodiversity			Population Human Health		Land, Soils, Geol.	Water		Air, Noise, Climate		Material Assets		Cultural Heritage		Landscape Visual	
SEOs / Summary of Draft Variation	B-1	B-2	B-3	PHH-1	PHH-2	LSG-1	WQ-1	WQ-2	ANC-1	ANC-2	MA-1	MA-2	CH-1	CH-2	LV-1	LV-2
To vary the Fingal Development Plan 2023-2029 to provide for lands sufficient for approximately 5,000 new units. This includes for approximately 2,500 residential units on additional residential-zoned land (11no. sites) and to replace the 'Long Term Strategic Reserve' designation from the Dunsink lands with local area plan designation	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑	☑

9.3 The Interrelationship between Environmental Factors

An overview of the key and minor / no interaction between environmental factors with potential for effects arising from the Variation No.1 are set out in the matrix in **Table 9.2**.

Variation No. 1 can give rise to positive or negative environmental effects for one environmental component and also have the potential to generate positive or negative environmental effects for inter-related environmental components – e.g. negative effect on soils can have a negative effect on biodiversity, water, and / or landscape. Likewise, the delivery of SuDS will improve water quality, which in turn can have a positive effect on aquatic ecology.

An assessment of impact inter-relationships and interactions is already embedded in the evaluation of environmental effects that has been carried out in this environmental report. This ensures that there is adequate coverage of all potential environmental effects associated with the implementation of Variation No.1. In addition, the mitigation measures set out in **Section 9.2.1 and Section 10** of this Report.

Table 9.2 Significant Interrelationships between Environmental Factors

Component / Effect	Biodiversity	Population & Human Health	Land, Soils & Geology	Water Quality	Air Quality, Noise and Climate	Material Assets	Cultural Heritage	Landscape & Visual
Biodiversity		☑	☑	☑	☑	☑	☑	☑
Population & Human Health	☑		☑	☑	☑	☑	☑	☑
Land, Soils & Geology	☑	☑		☑	☒	☑	☑	☑
Water Quality	☑	☑	☑		☒	☑	☒	☑
Air Quality, Noise and Climate	☑	☑	☒	☒		☑	☑	☒
Material Assets	☒	☑	☑	☑	☑		☒	☒
Cultural Heritage	☒	☑	☑	☒	☑	☑		☑
Landscape & Visual	☑	☑	☑	☑	☑	☑	☑	

Legend: Key Interaction ☑ Minor/No Interaction ☒

9.4 Potential Cumulative Effects

Cumulative effects can be described as the addition of many small impacts to create one larger, more significant, impact.

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

- Potential intra-Plan cumulative effects - these arise from the interactions between different types of potential environmental effects resulting from a plan, programme, etc. The interrelationships between environmental factors that help determine these potential effects are identified on **Table 9.2**.

- Potential inter-Plan cumulative effects - these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, projects, etc.

The Variation No.1 could have a relationship with other plans and programmes. However, these plans and programmes have also been subject to environmental assessment, including SEA and AA, for the purpose of preventing and mitigating potential negative environmental effects. **Table 9.3** lists the relevant plans and programmes that have potential for cumulative effects with the Variation No.1.

The assessment of cumulative effects above focused on national, regional and local plans, programmes, strategy and policy documents that have the potential to affect the same receiving environment that could be affected by the Variation No.1. The Variation No.1 will be required to comply with the relevant international, national and regional policies, plans and programmes and also undertaken individual environmental assessments for Appropriate Assessment, Environmental Impact Assessment and any other relevant processes as appropriate.

The Fingal Development Plan 2023-2029 sets out policies and objectives for land use, settlement strategy, sustainable development, biodiversity protection and enhancement, environmental protection, and management, cultural heritage, climate change, etc. for the study area. Other higher-level international, national and regional plans are integrated within the Fingal Development Plan 2023-2029 and have been assessed as such. The Variation No.1 will comply with the provisions set within the Fingal Development Plan 2023-2029 which itself has been subject to standalone environmental assessment (SEA, NIR, etc.).

The assessment of cumulative effects concludes that the implementation of the Variation No.1 will not result in direct, indirect or cumulative impacts which would have the potential to adversely affect the environment. Indeed, the implementation of the Variation No.1 has the potential for positive cumulative interactions in delivering on policies and objectives of higher-level plans in relation to increased housing supply for the country.

Table 9.3 below lists the relevant plans and programmes that have potential for in-combination/cumulative effects with the Variation No.1.

Table 9.3 In-combination / cumulative effects with other plans and programmes

Plan, Programme etc.	Potential Cumulative effect	Likely Cumulative Effect
National Planning Framework (NPF) Project 2040 (First Revision April 2025) National Development Plan (NDP) 2021-2030 (*As part of Project Ireland 2040 the National Development Plan sets out the Government's over-arching investment strategy and budget for the period 2021-2030*) including the National Development Plan Review 2025	The SEA and AA processes carried out during the preparation of the National Planning Framework have ensured that the potential significant environmental impacts associated with implementation of the plan have been identified and that these impacts have been given appropriate consideration.	No

Plan, Programme etc.	Potential Cumulative effect	Likely Cumulative Effect
Regional Spatial and Economic Strategy (RSES) 2019-2031 for the Eastern Midland Regional Assembly (EMRA)	The SEA and AA processes carried out during the preparation of the RSES have ensured that the potential significant environmental impacts associated with implementation of the RSES have been identified and that these impacts have been given appropriate consideration.	No
National CFRAMS Programme Eastern Catchment Flood Risk Assessment and Management (CFRAM) Study	Catchment-based Flood Risk Assessment and Management (CFRAM) Studies and their product – Flood Risk Management Plans (FRMPs) – are at the core of national policy for flood risk management and the strategy for its implementation. These studies are required by The Floods Directive [2007/60/EC], which is being implemented in Ireland through the European Communities (Assessment and Management of Flood Risks) Regulations 2010 [S.I.122/2010]. Each FRMP is accompanied by an associated SEA Environmental Report and Natura Impact Statement. The SEA and AA processes carried out during the preparation of the FRMP have ensured that the potential significant environmental impacts associated with implementation of the FRMP have been identified and that these impacts have been given appropriate consideration.	No
Greater Dublin Drainage Project	The Natura Impact Statement prepared for the Greater Dublin Drainage Project concludes that with the implementation of the mitigation measures the project will not result in direct, indirect or cumulative impacts which would have the potential to adversely affect the qualifying interests/special conservation interests of the Natura 2000 sites within the study area.	No
National 4th Biodiversity Action Plan 2023-2030	The Biodiversity Action notes the requirements and purposes of AA and SEA and the vision of the plan to conserve and restored for the benefit of all sectors of society.	No
Transport Strategy for the Greater Dublin Area 2022-2042	The Natura Impact Statement prepared for the Transport Strategy for the Greater Dublin Area 2022-2042 concludes that with the implementation of the mitigation measures the Strategy will not result in direct, indirect or cumulative impacts which would have the potential to adversely affect the qualifying interests/special conservation interests of the Natura 2000 sites within the study area.	No
National Sustainable Mobility Policy (2022)	The policy sets a strategic framework to 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade. The projects which will be implemented as a result of this national policy will be subject to their individual environmental impact assessment and appropriate assessment processes (as appropriate) and hence there would be no potential adverse effects on the overall receiving environment.	No

Plan, Programme etc.	Potential Cumulative effect	Likely Cumulative Effect
River Basin Management Plan (RBMP) for Ireland 2022-2027 (Water Action Plan 2024)	The SEA and AA processes carried out during the preparation of the RBMP have ensured that the potential significant environmental impacts associated with implementation of the Plan have been identified and that these impacts have been given appropriate consideration.	No
County Development Plans (Dublin City Development Plan 2022-2028, South Dublin County Development Plan 2022-2028, Meath County Development Plan 2021-2027, Kildare County Development Plan 2023-2029)	The County Development Plan (CDP) provides the principal planning strategy document for the development of a local authority area over the statutory time period of the plan. Each of the CDPs with Zone of Influence of County Fingal has been subject to SEA and AA processes to ensure that the potential significant environmental impacts associated with implementation of the Plan have been identified and that these impacts have been given appropriate consideration.	No

The assessment of in-combination / cumulative effects concludes that the implementation of the Variation No.1 will not result in direct, indirect or cumulative impacts which would have the potential to adversely affect the receiving environment.

10 Mitigation Measures

The findings set out in **Section 9** of this report confirms that, notwithstanding the positive intent and purpose of the Variation No.1, if unmitigated, has potential for adverse effects on aspects of the receiving environment.

The Fingal Development Plan 2023-2029 was subject to Strategic Environmental Assessment (SEA) in accordance with S.I. No. 436 of 2004 (the Planning and Development (Strategic Environmental Assessment) Regulations 2004), as amended by S.I. No. 201 of 2011 (the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011) and Appropriate Assessment (NIR) in accordance with Article 6(3) and 6(4) of the Habitats Directive. The SEA & NIR recommended a suite of mitigation measures following the assessment of the draft Fingal Development Plan 2023-2029. These measures were then embedded within the suite of protective policies and objectives to avoid the potential for likely significant effects on the receiving environment within the scope of the Fingal Development Plan 2023-2029. The protective policies of the Fingal Development Plan 2023-2029 are applicable for the purposes of assessing the Variation No.1.

The existing provisions within the Fingal Development Plan 2023–2029 mitigate the potential for likely significant effects on the receiving environment and provide sufficient safeguards for the implementation of Variation No. 1, including the changes to the Written Statement and the rezoning of the proposed sites.

The existing environmental protective policies and objectives of the Development Plan are set out in **Table 10.1**, the implementation of which will further prevent any significant impacts on the receiving environment. New text to be inserted as part of Variation No.1 is shown in ***green text*** in Objective IUO15 – Surface Water Management Plans in **Table 10.1.**

Table 10.1 Fingal Development Plan 2023 - 2029 (Additional Protective Policies for Environmental Receptors including European sites)

Policy/Objective	Description
Policy CSP22 – Howth, Sutton and Baldoyle	*Consolidate the development and protect the unique identity of Howth, Sutton and Baldoyle. This includes protection against overdevelopment.*
Policy CSP23 – Howth SAAO	*Protect the Howth Special Amenity Area Orders (SAAO), including the Buffer zone, from residential and industrial development intended to meet urban generated demand.*
Policy CSP24 – Liffey Valley SAAO	*Protect the Liffey Valley Special Amenity Area Orders (SAAO) from residential and industrial development intended to meet urban generated demand.*
Objective CSO25 – Optimising Existing Local Heritage Resource and Public Amenities	*Require that new development in the urban settlements of the Dublin City and Suburbs area optimises existing local heritage resources and public amenities, while protecting the character and biodiversity of the villages.*
Objective CSO27 – Promote and Enhance existing ACAs	*Continue to promote and enhance the existing ACAs within our urban villages and protect their historic characters.*
Objective CSO57 – Harbours, Beaches	*Preserve and improve access to the harbours, beaches and seashores of Balbriggan, Skerries and Rush, while protecting environmental resources including water, biodiversity, and landscape sensitivities.*

Policy/Objective	Description
Seashores – Balbriggan, Skerries and Rush	
Objective CSO59 – Historic Core of Lusk	*Protect and conserve the special character of the historic core of Lusk including the area of archaeological notification in the centre of the town having regard to the physical and social character of the core area particularly in the vicinity of St. MacCullin's Church and Main Street, and to promote a conservation-led approach to the consolidation and redevelopment of the town core.*
Objective SPQHO6 – Universal Design Approach	*Promote and facilitate a Universal Design for all developments.*
Policy SPQHP12 – Active Travel Links	*Ensure that all necessary active travel links to access public transport, schools, amenities and neighbouring communities from new or expanded residential developments to be available where possible before the first housing units are occupied, whether the infrastructure is being provided by the Council or by a private developer.*
Objective SPQHO33 – New Residential Development and Energy Efficiency	*Ensure new residential development incorporates energy efficiency measures and promotes innovative renewable energy opportunities, for example by passive solar design, natural ventilation, and vegetation (green roofs etc) on buildings and makes most effective and sustainable use of water, aggregates and other resources.*
Objective SPQHO59 – Cultural Heritage features	*Preserve, protect and enhance the natural, built and cultural heritage features of Rural Villages.*
Objective SPQHO95 – Flooding and Coastal erosion in the South Shore Area	*Require that an applicant for a house in the South Shore area demonstrates, to the satisfaction of the Planning Authority, that the site is not and will not be subject to flooding or erosion in line with national climate change predictions.*
Objective SPQHO96 – Ecological Integrity of Sites in the South Shore Area	*Require that an applicant demonstrates that the impact of any proposed house will not adversely affect, either directly or indirectly, the ecological integrity of any European site.*
Policy SPQHP58 – Preservation of Greenbelts	*Preserve Greenbelts in Fingal in order to safeguard valuable countryside; to ensure that existing urban areas within Fingal do not coalesce to ensure that citizens can enjoy the County's natural amenities and to strengthen and consolidate greenbelts around key settlements.*
Objective CIOSO52 – Trees	*Protect, preserve and ensure the effective management of trees and groups of trees.*
Policy CAP1 – National Climate Action Policy	*Support the implementation of national objectives on climate change including the national Climate Action Plan 2023 (CAP23), the National Adaptation Framework 2018 and the National Energy and Climate Plan for Ireland 2021–2030 and other relevant legislation, policy and agreements in relation to climate action.*

Policy/Objective	Description
Objective CAO2 – Fingal County Council Climate Change Action Plan	*Implement Fingal County Council's Climate Change Action Plan 2019–2024 in consultation and partnership with stakeholders including the Dublin Metropolitan Climate Action Regional Office (CARO) and Codema.*
Policy CAP2 – Mitigation and Adaptation	*Prioritise measures to address climate change by way of both effective mitigation and adaptation responses in accordance with available guidance and best practice.*
Policy CAP3 – Climate Resilience and Settlement Patterns	*Promote sustainable settlement and transport strategies within the county and identify measures, including targets for modal shift, to reduce energy use, GHG emissions and adaptation to climate change.*
Policy CAP5 - Climate Mitigation and Adaptation in the Built Environment	*Ensure the built environment is equipped for the impacts of climate change by supporting climate change mitigation and adaptation measures as part of new and existing developments.*
Policy CAP10 – Climate Mitigation Actions in the Built Environment	*Promote low carbon development within the County which will seek to reduce carbon dioxide emissions and which will meet the highest feasible environmental standards during construction and occupation. New development should generally demonstrate/provide for:* *a. Building layout and design which maximises daylight, natural ventilation, active transport and public transport use;* *b. Sustainable building/services/site design to maximise energy efficiency;* *c. Sensitive energy efficiency improvements to existing buildings;* *d. Energy efficiency, energy conservation, and the increased use of renewable energy in existing and new developments;* *e. On-site renewable energy infrastructure and renewable energy;* *f. Minimising the generation of site and construction waste and maximising reuse or recycling; and* *g. The use of construction materials that have low to zero embodied energy and CO2 emissions.*
Policy CAP11 – Climate Adaptation Actions in the Built Environment	*Development proposals should demonstrate sustainable design principles for new buildings/ services/site. The Council will promote and support development which is resilient to climate change. This would include:* *a. Measures such as green roofs and green walls to reduce internal overheating and the urban heat island effect;* *b. Ensuring the efficient use of natural resources (including water) and making the most of natural systems both within and around buildings;*

Policy/Objective	Description
	c. Minimising pollution by reducing surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems (SuDS); *d. Reducing flood risk, damage to property from extreme events– residential, public and commercial;* *e. Reducing risks from temperature extremes and extreme weather events to critical infrastructure such as roads, communication networks, the water/drainage network, and energy supply;* *f. Promoting and protecting biodiversity and green infrastructure.*
Policy CAP12 – Climate Action Energy Statements	*All new developments involving 15 residential units and/or more than 1,000 sq. m. of commercial floor space, or as otherwise required by the Planning Authority, will be required to submit a Climate Action Energy Statement as part of the overall Design Statement to demonstrate how low carbon energy and heating solutions, have been considered as part of the overall design and planning of the proposed development.*
Policy CAP25 – Circular Economy	*Support the shift towards the circular economy approach as set out in the National Waste Policy for 2020–2025.*
Policy CAP26 – Waste Management Plans for Construction and Demolition Projects	*Have regard to existing Best Practice Guidance on Waste Management Plans for Construction and Demolition Projects as well as any future updates to these Guidelines in order to ensure the consistent application of planning requirements.*
Policy CAP30 – Natural Flood Risk Mitigation	*Encourage the use natural flood risk mitigation or nature-based solutions including integrated wetlands, green infrastructure, and Sustainable Drainage Systems (SuDS) as part of wider adaptation and mitigation responses to achieve flood resilience.*
Policy CAP33 – Coastal Zone Management	*Support coastal zone management measures for adapting to climate change which include restoration of degraded ecosystems, increased flood resilience, water quality improvement, habitat conservation and provision of amenities for the residents of and visitors to Fingal.*
Policy CMP13 – Accessible Pedestrian and Cyclist Environment	*Promote and facilitate a network of pedestrian and cycle routes and public realm that is universally accessible for all ages and abilities in accordance with best accessibility practice.*
Objective CMO37 – National Transport Agencies	*Work with the TII and NTA and other relevant national transport agencies to protect capacity and deliver improvements of the strategic road network and junction upgrades where necessary in line with National and Regional policy objectives.*
Objective CMO44 – Roads and Street Proposals and Nature-Based Solutions	*Incorporate sustainable drainage features and wildlife crossings including bridges and underpasses into the designs for new road infrastructure and where possible, incorporation of such measures into the existing road network.*

Policy/Objective	Description
Objective CMO45 - Design Manual for Urban Roads and Streets	*Design new streets and roads within urban areas in accordance with the principles, approaches and standards contained within DMURS.* *-Junctions will be designed with corner radi that reduce pedestrian crossing distances to the minimum allowable by DMURS wherever possible.* *- The narrowest carriageway widths allowable by DMURS will be the default standard in Fingal wherever possible.*
Objective CMO48 - Roads and Streets and Green Infrastructure	*New roads and streets to incorporate green Infrastructure elements such as sustainable drainage infrastructure, planting of native trees, hedgerows and pollinator species in medians and on roadside verges, as appropriate to the location*
Objective EEO41 – Marine Sector	*Support the existing diverse nature of the marine sector in Fingal, and identify and promote sustainable growth opportunities, while protecting European sites. This shall be achieved through engagement and partnership with the relevant agencies, sectoral representatives and local communities.*
Objective EEO47 – Conservation and Protection	*Ensure the economic benefits associated with promoting the County's natural, cultural and built heritage are balanced with due consideration for their conservation and protection.*
Objective EEO77 – Preserve and Protect Coastal Wetlands, Coastal Habitats and Estuarine Marshes	*Preserve and protect coastal wetlands, coastal habitats, and estuarine marsh lands in coastal areas from inappropriate development, including land reclamation. Any proposals for land reclamation in coastal areas shall be subject to Screening for Appropriate Assessment and to an assessment of impacts on any such wetlands, coastal habitats, and estuarine marsh lands and its impacts on coastal processes including erosion, deposition, accretion and flooding particularly in light of climate change.*
Policy GINHP2 – Protection of Green Infrastructure	*Ensure that areas and networks of green infrastructure are identified, protected, enhanced, managed and created to provide a wide range of environmental, social and economic benefits to communities.*
Policy GINHP5 – Green Infrastructure Network	*Develop the green infrastructure network to ensure the conservation and enhancement of biodiversity, including the protection of European Sites, the provision of accessible parks, open spaces and recreational facilities (including allotments and community gardens), the sustainable management of water, the maintenance of landscape character including historic landscape character and the protection and enhancement of archaeological and heritage landscapes.*
Objective GINHO2 - Fragmentation	*Reduce fragmentation and enhance the resilience of Fingal's green infrastructure network by strengthening ecological links between urban areas, Natura 2000 sites, proposed Natural Heritage Areas, parks and*

Policy/Objective	Description
	open spaces and the wider regional network by connecting all new developments into the wider green infrastructure network.
Policy GINHP7 – Protection	*Protect and enhance the natural, historical, amenity and biodiversity value of the County's watercourses, flood plains, riparian corridors, wetlands and coastal area though long-term and liaison with relevant Prescribed Bodies where appropriate.*
Policy GINHP8 – Archaeology and Green Infrastructure	*Protect, conserve and enhance landscape, natural, cultural and built heritage features, and support the implementation of the Fingal Heritage Plan in relation to the provision of green infrastructure.*
Objective GINHO17 – Fingal Heritage Plan	*Protect, conserve and enhance landscape, natural, cultural and built heritage features, and support the objectives and actions of the Fingal Heritage Plan.*
Policy GINHP9 - Landscape Character	*Ensure green infrastructure provision responds to and reflects landscape character including historic landscape character, conserving, enhancing and augmenting the existing landscapes and townscapes of Fingal which contribute to a distinctive sense of place.*
Policy GINHP11 – Biodiversity Action Plan	*Support the adoption and implementation of the Fingal Biodiversity Action Plan, implementation of the National Biodiversity Action Plan 2017– 2021 and the All-Ireland Pollinator Plan 2021–2025 and any superseding plans.*
Policy GINHP12 – Protected Sites	*Protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, and Refuges for Fauna.*
Policy GINHP15 – Biodiversity in Buildings Guidance	*Promote the inclusion of swift, swallow, house martin, house sparrow, starling, bat and insect boxes and structures in and on building facades and develop a guidance document on how to incorporate these structures into buildings.*
Policy GINHP16 – Rewilding and Pollinator Initiatives	*Promote and support rewilding and pollinator initiatives in Fingal.*
Objective GINHP16 – Rewilding and Pollinator Initiatives	*Support the National Parks and Wildlife Service, in the maintenance and achievement of favourable conservation status for the habitats and species in Fingal by taking full account of the requirements of the Habitats and Birds Directives, in the performance of its functions.*
Objective HINHO28 – Protection of Natural Heritage Areas	*Ensure that development does not have a significant adverse impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Habitat Directive Annex I sites and Annex II species contained therein, and on rare and threatened species including those protected by law and their habitats.*

Policy/Objective	Description
Objective GINHO30 – Invasive Species	*Continue the control programs of invasive species with all relevant stakeholders and landowners to control the key invasive species*
Objective GINHO32 – Development and Invasive Species	*Ensure that proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, the applications will be required to submit a control and management program for the particular invasive species as part of the planning process and to comply with the provisions of European Communities (Birds and Natural Habitats) Regulations 2011 and EU Regulations 1143/2014.*
Policy GINHP17 – Protection of European and National Sites	*Strictly protect areas designated or proposed to be designated as Natura 2000 sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs); also known as European sites) including any areas that may be proposed for designation or designated during the lifetime of this Plan.*
Policy GINHP18 – Species Protection	*The Council will seek to protect rare and threatened species, including species protected by law and their habitats by requiring planning applicants to demonstrate that proposals will not have a significant adverse impact on such species and their habitats.*
Objective GINHO33 – Annex I and Annex II	*Ensure that development does not have a significant adverse impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Habitat Directive Annex I sites and Annex II species contained therein, and on rare and threatened species including those protected by law and their habitats.*
Policy GINHP19 – Ecological Buffer Zones	*Protect the functions of the ecological buffer zones and ensure proposals for development have no significant adverse impact on the habitats and species of interest located therein.*
Objective GINHO35 – Appropriate Assessment	*In accordance with Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities 2010, any plans or projects that are likely to have a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects, are subject to a screening for Appropriate Assessment unless they are directly connected with or necessary to the management of a Natura 2000 site.*
Objective GINHO37 – Nature Development Areas	*Maintain and/or enhance the biodiversity of the Nature Development Areas indicated on the Green Infrastructure maps.*
Objective GINHo40 – Ecological Assessments	*Protect the ecological functions and integrity of the corridors indicated on the Plan Green Infrastructure maps. An ecological assessment may be required for any proposed development likely to have a significant impact on habitats and species of interest in an ecological corridor or stepping-stone.*

Policy/Objective	Description
Objective GINHO41 – Protection of Rivers	*Protect rivers, streams and other watercourses and maintain them in an open state capable of providing suitable habitat for fauna and flora, including fish.*
Objective GINHO42 – Inland Fisheries	*Take full account of Inland Fisheries Guidelines on the Protection of Fisheries during Construction works in and adjacent to Waters 2016 and Planning for Water Courses in the Urban Environment 2020 when undertaking, approving or authorising development or works which may impact on rivers, streams and canals and their associated habitats and species.*
Objective GINHO44 – Setback of New Surface Water Drainage Outfalls	*Set back new surface water drainage outfalls from the main river channel on the landward edge of the floodplain or a designed wetland feature to cater for water quality improvement before the surface discharges into the river.*
Policy GINHP21 – Protection of Trees and Hedgerows	*Protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/ or contribute to landscape character and ensure that proper provision is made for their protection and management in line with the adopted Forest of Fingal-A Tree Strategy for Fingal.*
Policy GINHP22 – Tree Planting	*Provide for appropriate protection of trees and hedgerows, recognising their value to our natural heritage, biodiversity and climate action and encourage tree planting in appropriate locations.*
Objective GINHO48 – Wildlife Act and Roads Act	*The Council shall comply with the requirements set out in the Wildlife Act and Roads Act in the context of its maintenance programmes and housing, recreational and infrastructure developments.*
Objective GINHO49 – Tree Preservation order Review	*Review Tree Preservation Orders within the County and maintain the conservation value of trees and groups of trees that are the subject of any Tree Preservation Order.*
Objective GINHO51 – Protection of Shellfish Waters	*Protect the quality of designated shellfish waters off the Fingal coast.*
Policy GINHP23 – Maintenance of Geological Sites	*Seek to maintain and where possible enhance the geological heritage of these sites and to provide access to these sites where possible and appropriate.*
Objective GINHO52 – Protection of Geological Site	*Protect and enhance the geological and geomorphological heritage of the County Geological Sites listed in Table 9.2. and indicated on Green Infrastructure Maps.*
Objective GINHO54 - Soils	*Reduce land take, soil sealing and loss of natural soils in urban and rural areas.*
Policy GINHP24 – National Landscape Strategy	*Support the aims and objectives of the European Landscape Convention by implementing the relevant objectives and actions of the National Landscape Strategy 2015–2025.*

Policy/Objective	Description
Policy GINHP25 – Preservation of Landscape Types	*Ensure the preservation of the uniqueness of a landscape character type by having regard to the character, value and sensitivity of a landscape when determining a planning application.*
Objective GINHO56 – Visual Impact Assessments	*Require any necessary assessments, including visual impact assessments, to be prepared prior to approving development in highly sensitive areas.*
Objective GINHO57 – Development and Landscape	*Ensure development reflects and, where possible, reinforces the distinctiveness and sense of place of the landscape character types, including the retention of important features or characteristics, taking into account the various elements which contribute to their distinctiveness such as geology and landform, habitats, scenic quality, settlement pattern, historic heritage, local vernacular heritage, land-use and tranquillity.*
Objective GINHO58 – Sensitive Areas	*Resist development such as houses, forestry, masts, extractive operations, landfills, caravan parks, and campsites, and large agricultural/horticulture units which would interfere with the character of highly sensitive areas or with a view or prospect of special amenity value, which it is necessary to preserve.*
Objective GINHO59 – Development and Sensitive Areas	*Ensure that new development does not impinge in any significant way on the character, integrity and distinctiveness of highly sensitive areas and does not detract from the scenic value of the area. New development in highly sensitive areas shall not be permitted if it:* *- Causes unacceptable visual harm.* *- Introduces incongruous landscape elements.* *- Causes the disturbance or loss of (i) landscape elements that contribute to local distinctiveness, (ii) historic elements that contribute significantly to landscape character and quality such as field or road patterns, (iii) vegetation which is a characteristic of that landscape type and (iv) the visual condition of landscape elements.*
Policy GINHP26 – Preservation of Views and Prospects	*Preserve views and prospects and the amenities of places and features of natural beauty or interest including those located within and outside the County.*
Objective GINHO60 – Protection of Views and Prospects	*Protect views and prospects that contribute to the character of the landscape, particularly those identified in the Development Plan, from inappropriate development.*
Objective GINHO61 – Landscape / Visual Assessment	*Require a Landscape/Visual Assessment to accompany all planning applications for significant proposals that are likely to affect views and prospects.*
Policy GINHP28 – Protection of High Amenity Areas	*Protect High Amenity areas from inappropriate development and reinforce their character, distinctiveness and sense of place.*

Policy/Objective	Description
Objective GINHO67 – Development and High Amenity Areas	*Ensure that development reflects and reinforces the distinctiveness and sense of place of High Amenity areas, including the retention of important features or characteristics, taking into account the various elements which contribute to its distinctiveness such as geology and landform, habitats, scenic quality, settlement pattern, historic heritage, local vernacular heritage, land-use and tranquillity*
Policy GINHP29 – Development and the Coast	*Protect the special character of the coast by preventing inappropriate development along the coast.*
Objective GINHO73 – New Development and the Coast	*Prevent inappropriate development along the coast, particularly on the seaward side of coastal roads. New development for which a coastal location is required shall, wherever possible, be accommodated within existing developed areas.*
Objective GINHO81 – Protection of Beaches	*Protect beaches, and bathing areas as valuable local amenities and as a tourism resource and support the maintenance, protection and improvement of access to them.*
Objective GINHO82 – Protection of Bathing Waters	*Protect bathing waters, including those listed in the Water Framework Directive Register of Protected Areas for the Eastern River Basin District, at Sutton, Portmarnock, Malahide, Donabate, Portrane, Rush, Loughshinny, Skerries and Balbriggan in order that they meet the required bathing water standards and implement the findings and recommendations of the Quality of Bathing Water in Ireland reports as published.*
Policy HCAP3 – Record of Monuments and Places/Sites and Monuments Record	*Safeguard archaeological sites, monuments, objects and their settings listed in the Record of Monuments and Places (RMP), Sites and Monuments Record (SMR), underwater cultural heritage including protected wrecks and any additional newly discovered archaeological remains.*
Objective HCAO2 – Protection of RMPs/SMRs	*Protect all archaeological sites and monuments, underwater archaeology, and archaeological objects, which are listed in the Record of Monuments and Places, Wreck Inventory of Ireland and all sites and features of archaeological and historic interest discovered subsequent to the publication of the Record of Monuments and Places, and to seek their preservation in situ (or at a minimum, preservation by record) through the planning process.*
Policy HCAP5 – Development Design	*Incorporate heritage features into infrastructure design at an early stage in the development planning and management process to protect and promote the cultural heritage resource and create awareness and interpretation.*
Objective HCAO7 – Archaeology and Development Design	*Ensure archaeological remains are identified and fully considered at the very earliest stages of the development process, that schemes are designed to avoid impacting on the archaeological heritage.*

Policy/Objective	Description
Objective HCAO8 – Arcaheological Impact Assessment	*Require that proposals for linear development over one kilometre in length; proposals for development involving ground clearance of more than half a hectare; or developments in proximity to areas with a density of known archaeological monuments and history of discovery; to include an Archaeological Impact Assessment and refer such applications to the relevant Prescribed Bodies.*
Objective HCAO10 – Context of Archaeological Monuments	*Ensure that development within the vicinity of a Recorded Monument or Zone of Archaeological Notification does not seriously detract from the setting of the feature and is sited and designed appropriately.*
Objective HCAO11 – Impacts of large-scale development	*Ensure that proposals for large scale developments and infrastructure projects consider the impacts on the archaeological heritage and seek to avoid them.*
Policy HCAP8 – Protection of Architectural Heritage	*Ensure the conservation, management, protection and enhancement of the architectural heritage of Fingal through the designation of Protected Structures and Architectural Conservation Areas, the safeguarding of designed landscapes and historic gardens, and the recognition of structures and elements with no specific statutory designation that contribute positively to the vernacular, industrial, maritime or 20th century heritage of the County.*
Policy HCAP11 – Conservation of Architectural Heritage	*Conserve and protect buildings, structures and sites of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest by adding or retaining them on the Record of Protected Structures or by designating groups of structures as Architectural Conservation Areas.*
Policy HCAP14 – Architectural Conservation Areas	*Protect the special interest and character of all areas which have been designated as an Architectural Conservation Area (ACA). Development within or affecting an ACA must contribute positively to its character and distinctiveness and take opportunities to protect and enhance the character and appearance of the area and its setting wherever possible. Development shall not harm buildings, spaces, original street patterns, archaeological sites, historic boundaries or features, which contribute positively to the ACA.*
Objective HCAO25 – Architectural Heritage Impact Assessment	*Require an Architectural Heritage Impact Statement as part of the planning documentation for development that has the potential to affect the relationship between the Protected Structure and any complex of adjoining associated buildings, designed landscape features, or designed views or vistas from or to the structure. This particularly relates to large landholdings such as country estates, institutional complexes, and industrial sites where groups of structures have a functional connection or historical relationship with the principal building.*

Policy/Objective	Description
Policy HCAP18 – Designed Landscape Features, Setting and Views	*Protect the setting, significant views, and built features of historic designed landscapes and promote the conservation of their essential character, both built and natural.*
Policy HCAO32 – Protection of Cultural Infrastructure	*Ensure that culture infrastructure is valued and protected as an integral part of the fabric of Fingal, in line with national and regional policy.*
Objective IUO1 – Water Conservation Measures	*Promote the sustainable use of water and water conservation and demand management measures in new and existing developments within the County, to promote water conservation by all water users.*
Objective IUO3 – Water Services Infrastructure	*Ensure that all new developments in areas served by a public foul sewerage network connect to the public sewerage system and comply with the requirements of the Uisce Éireann Foul Sewer specification (where applicable).*
Objective IUO4 – Separate Foul and Surface Water Drainage Systems	*Require all new development to provide separate foul and surface water drainage systems and to prohibit the connection of surface water outflows to the foul drainage network where separation systems are available, and vice versa (foul to surface), where separation systems are available.*
Policy IUP10 – Water Conservation and SuDS	*Promote the inclusion of water conservation and SuDS measures in all developments, to reduce the level of surface water run-off, improve water quality and contribute to adaptation to climate change through natural solutions.*
Objective IUO11 – SuDS in New Developments	*SuDS shall be incorporated into all parts of a development (open spaces, roads, footpaths, private areas), and have regard to the FCC SuDs Guidance Document – Green/ Blue Infrastructure for Development, as amended (Appendix 11), and shall ensure:* - *That the design of SuDS enhances the quality of open spaces and when included as part of any open space provision, it must contribute in a significant and positive way to the design and quality of the open space.* - *Open space areas shall not be dominated by SuDS features.* - *Underground tanked systems, whether concrete or plastic, are the least favoured means for surface water management and shall only be used when green solutions have proven not feasible.* *See also Appendix 11 (SuDS Guidance Document), and Chapter 14 Development Management Standards (Section 14.20.3 SuDS).*
Objective IUO13 – Surface Water Run-Off	*Require that all surface water run-off from new / extended domestic driveways, repaired/ replacement driveways and vehicular entrances (where such development is not exempted from the requirement to obtain planning permission) is managed using SuDS, ensuring no increase in surface water discharges to the public drainage network.*

Policy/Objective	Description
Objective IUO15 – Surface Water Management Plans	*Require the preparation of a Surface Water Management Plan as part of all new developments which shall include the following:* - *Identify and assess the existing surface water movements through the development before considering and developing a surface water management system using SuDS, having regard to our Fingal Guidance Document – Green/ Blue Infrastructure for Development, as amended (Appendix 11).* - *Incorporate SuDS along the route of the water movement to enhance the water quality effects of nature-based systems at the different stages – Treatment Train approach from source to discharge.* - ***Require applications for new developments to submit details of surface water management plans during construction to ensure compliance with the water quality standards and to protect the water quality and flow regime of surface and groundwater resources.***
Policy IUP12 – Flood Risk Management	*Ensure the continued incorporation of Flood Risk Management into the spatial planning of the County of Fingal, to meet the requirements of the EU Floods Directive and the EU Water Framework Directive and to promote a climate resilient County.*
Policy IUP13 – Protection of Fingal's Floodplains, wetlands and Coastal Areas	*Protect and enhance the County's floodplains, wetlands and coastal areas subject to flooding as vital green infrastructure which provides space for storage and conveyance of floodwater, enabling flood risk to be more effectively managed and reducing the need to provide flood defences in the future.*
Objective IUO17 – Strategic Flood Risk Assessment	*Implement and comply fully with the recommendations of the Strategic Flood Risk Assessment prepared as part of the Fingal Development Plan 2023–2029.*
Policy IUP15 – Water Quality	*Support initiatives to improve water quality and to achieve good ecological status in compliance with the Water Framework Directive and associated River Basin Management Plans, particularly those which employ nature-based management measures, and explore opportunities for targeted watercourse improvement interventions which are designed to deliver a wider range of environmental benefits.*
Policy IUP16 – IFI Guidelines Planning for Watercourses in Urban Environment 2020	*Protect inland and sea fisheries and take full account of Inland Fisheries Ireland Guidelines Planning for Watercourses in the Urban Environment 2020, when undertaking, approving or authorising development or works which may impact on rivers streams, watercourses, estuaries, shorelines and their associated habitats.*
Policy IUP17 – Groundwater	*Strive to achieve 'good status' in all waterbodies and protect and develop, in a sustainable manner, the existing groundwater sources and aquifers in the County and control development in a manner consistent*

Policy/Objective	Description
	with the proper management of these resources in compliance with the Water Framework Directive, the Eastern River Basin Management Plan 2017–2021 and any subsequent plan.
Objective IUO25 – River Basin Management Plans	*Maintain, improve and enhance the environmental and ecological quality of our surface waters, groundwater and aquifers by implementing the EU Water Framework Directive through the relevant programme of measures set out in the River Basin Management Plans and to take into consideration the River Basin Management Plan and Programme of Measures when considering new development proposals.*
Policy IUP20 – Implementation of Existing Waste Management Policy	*Support the implementation of existing waste management policy and promote education and awareness on all issues associated with waste management, both at industry and community level, including the promotion of waste reduction by encouraging reuse, recycling and recovery of waste. Fingal County Council will continue to promote and support the objectives of the Eastern and Midlands Region Waste Management Plan 2015–2021, or such plans as may be updated.*
Policy IUP21 – Environmental Policy, Legislation and Guidance	*Have regard to European Union, National and Regional waste and related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.*
Objective IUO28 – Eastern Midlands Region Waste Management Plan	*Implement the provisions of the Eastern Midlands Region Waste Management Plan 2015–2021 or any subsequent Waste Management Plan applicable within the lifetime of the Development Plan. All prospective developments in the County will be expected to take account of the provisions of the Regional Waste Management Plan and adhere to the requirements of that Plan.*
Objective IUO29 – Sustainable Waste Recovery and Disposal	*Provide for, promote and facilitate high quality sustainable waste recovery and disposal infrastructure/technology in keeping with the EU waste hierarchy, national legislation and regional waste management policy to adequately cater for Fingal's growing population.*
Objective IUO30 – Hazardous Waste	*Adhere to the recommendations of the National Hazardous Waste Management Plan 2014–2020 and any subsequent plan, and to co-operate with the EPA and other agencies in the planning, organisation and supervision of the disposal of hazardous waste streams, including hazardous waste identified during construction and demolition projects. To continue to promote the use of clean technology and minimisation of hazardous waste production in all development within the County.*
Policy IUP24 – Recycling / Re-Use	*Promote and encourage the establishment of re-use, recycling and repair activities to prevent and minimise waste generation and disposal, in accordance with the Eastern Midlands Region Waste Management Plan 2015–2021 (or any subsequent plan).*
Policy IUP25 – Litter Management	*Support the implementation of the Fingal Litter Management Plan 2019 and any subsequent plans through enforcement of the litter bye-laws,*

Policy/Objective	Description
	street cleaning and continued roll out of education and awareness campaigns.
Objective IUO34 – Waste Management in New Developments	*Require the provision of appropriate, well designed, accessible space to support the storage, separation and collection of as many waste and recycling streams as possible in all new commercial and residential developments within the County. See also Chapter 14, Development Management Standards (Section 14.20.12: Waste Management)*
Policy IUP26 – COMAH Establishments/SEVESO	*Continue to have regard to the provisions of the SEVESO III Directive (2012/18/EU) relating to the control of major accident hazards involving dangerous substances and its objectives to prevent major accidents and limit the consequences of such accidents. Fingal will continue to have regard to the provisions of the Directive and recommendations of the HSA in the assessment of all planning applications located on, or impacted by, COMAH establishments in accordance with Guidance on Technical Land-use Planning Advice: for Planning Authorities and Operators of COMAH establishments 2021.*
Objective IUO37 – Restrictions on Development in proximity of a Seveso Site	*Have regard to the provision of the Major Accident Directive (Seveso III) (European Council Directive 2012/18/EU) and impose restrictions in consultation with the HSA, on developments abutting or within proximity of a Seveso site. The extent of restrictions on development will be dependent on the type of risk present and the quantity and form of the dangerous substance present or likely to be present.*
Policy IUP28 – Promote Energy Efficient Development	*Promote more energy efficient development through the location of housing and employment along public transport/cycling corridors, where people can choose to use less energy intensive public transport or cycling, rather than being dependent on the car.*
Policy IUP30 – Promote Low Carbon Energy Development	*Promote more energy-efficient development through the location of housing and employment along district heating hubs, or potential renewable energy locations, where people can connect buildings to energy efficient, low-carbon alternatives.*
Objective IUO60 – Dublin Regional Air Quality Management Plan	*Implement the recommendations of the Dublin Regional Air Quality Management Plan (and any subsequent Plan) and to implement the relevant spatial planning recommendations and actions of the Dublin Agglomeration Environmental Noise Action Plan 2018–2023 or any superseding action plan.*
Policy IUP42 - Dublin Agglomeration Environmental Noise Action Plan	*Support the pro-active management of noise in the County and to continue to work with the Dublin Local Authorities and relevant statutory agencies, through the implementation of measures* *to avoid, mitigate and minimise noise in accordance with the Noise Action Plan for the County of Fingal 2018–2023 and the Dublin Agglomeration Environmental Noise Action Plan 2018–2023 (and any subsequent plans).*

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Objective IUO61 – Implementation of Noise Plans	*Implement the relevant spatial planning recommendations and actions of the Dublin Agglomeration Environmental Noise Action Plan 2018–2023 and the Noise Action Plan for Dublin Airport 2019–2023 (or any subsequent plan), working in conjunction with relevant statutory agencies.*
Objective IUO62 – Nosie Sensitive Developments	*Consider the location, design and construction of noise sensitive developments, to ensure they are protected from major noise sources, where practical, and to support and facilitate the monitoring and enforcement by Fingal's Environmental Health Department of noise reduction measures in areas experiencing excess noise.*
Objective IUO63 – Noise Exposure Maps	*Developments for noise sensitive uses shall have regard to the noise exposure maps contained within the Fingal Noise Action Plan 2018 – 2023 or any supplementary mapping prepared by Fingal County Council, and developers shall be required to produce a noise impact assessment and mitigation plans, where necessary, for any new noise sensitive development within these areas*
Policy IUP44 – Light Pollution	*Promote appropriate lighting installations, availing of best practice as published by the relevant authority, designed to minimise light pollution / unwanted environmental effects while maximising the light reaching the public realm.*
Objective DMSO1 – Screening for Appropriate Assessment	*Ensure that all plans and projects in the County which could, either individually or in combination with other plans and projects, have a significant effect on a European site or sites are subject to Screening for Appropriate Assessment.*
Objective DMSO2 – Screening for Environmental Impact Assessment	*Ensure that all development projects within the County that are below the mandatory thresholds for Environmental Impact assessment, which could individually or in combination with other projects have significant effects on the environment are subject to EIA Screening*
Objective DMSO111 – Mobility Management Plan	*For all new developments which are likely to generate a significant demand for travel, require the preparation and submission of a Mobility Management Plan as part of the development management process. This requirement includes existing developments that are expanding or intensifying their use.*
Objective DMSO113 – Traffic and Transport Assessment	*Require the provision of a Traffic and Transport Assessment where new development is likely to have a significant effect on travel demand and the capacity of the surrounding transport network including the road network and public transport services network.*
Objective DMSO125 – Management of Trees and Hedgerows	*Protect, preserve and ensure the effective management of trees and groups of trees and hedgerows.*
Objective DMSO126 – Protection of Trees and	*Ensure during the course of development, trees and hedgerows that are conditioned for retention are fully protected in accordance with BS5837*

Policy/Objective	Description
Hedgerows during Development	*2012 Trees in relation to the Design, Demolition and Construction – Recommendations or as may be updated and are monitored by the appointed arboriculture consultant.*
Objective DMSO127 – Use of Native Species in New Developments	*Require the use of native species where appropriate in new developments in consultation with the Council.*
Objective DMSO138 – Protection and Enhancement of Biodiversity	*Ensure all development and infrastructure proposals include measures to protect and enhance biodiversity leading to an overall net biodiversity gain.*
Objective DMSO140 – Protection of Existing Landscape	*Protect existing landscape features such as scrub, woodland, large trees, hedgerows, meadows, ponds and wetlands which are of biodiversity or amenity value and/or contribute to landscape character and ensure that proper provision is made for their protection and management.*
Objective DMSO141 – Incorporation of Habitat Features	*Incorporate habitat features (new or existing) and other conservation measures for species of conservation interest (e.g. legally protected species or Amber and Red listed bird species) in the Integrated Green Infrastructure Plan.*
Objective DMSO142 – Invasive Species Control Plan	*Where invasive plant species such as Japanese Knotweed, Giant Hogweed, Himalayan Balsam, Rhododendron Ponticum and three-cornered leek are present on a development site, the developer shall submit an invasive species control plan as part of the planning process. This control plan will describe what and where invasive species are present and what control measures will be implemented, who will implement these and when they will be implemented. Annual monitoring reports on the control program are to be submitted to the Planning Authority until the invasive species is eradicated.*
Objective DMSO143 – Habitat facilities for Wildlife Species	*Require all new developments to incorporate habitat facilities for wildlife species as appropriate including Kestrel, Peregrine, Swifts, House Sparrows, Swallow, Starling, Bats and insects in or on buildings facades.*
Objective DMSO144 – Appropriate Assessment	*Ensure Screening for Appropriate Assessment and, where required, full Appropriate Assessment is carried out for all plans and projects in the County which, individually, or in combination with other plans and projects, are likely to have a significant direct or indirect impact on any European site or sites.*
Objective DMSO145 – Screening for Appropriate Assessment	*Ensure that sufficient information is provided as part of development proposals to enable Screening for Appropriate Assessment to be undertaken and to enable a fully informed assessment of impacts on biodiversity to be made.*
Objective DMSO146 – Natura Impact Statements	*Ensure that Natura Impact Statements (NIS) and any other ecological impact assessments submitted in support of proposals for development*

Policy/Objective	Description
	are carried out by appropriately qualified professionals and that any necessary survey work takes place in an appropriate season.
Objective DMSO147 – Natura Impact Statement guidance	*Ensure planning applications for proposed developments likely to have significant direct or indirect impacts on any European Site or sites are accompanied by a Natura Impact Statement prepared in accordance with the Guidance issued by the Department of the Environment, Heritage and Local Government (Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009).*
Objective DMSO148 – ecological Impact Assessment	*Ensure ecological impact assessment is carried out for any proposed development likely to have a significant impact on proposed Natural Heritage Areas (pNHAs), Natural Heritage Areas (NHAs), Statutory Nature Reserves, Refuges for Fauna, Habitat Directive Annex I sites and Annex II species contained therein, or rare and threatened Flora Protection order and Red Data Book species and their habitats. Ensure appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment.*
Objective DMSO149 – Protection of Bats	*Ensure that proposals for developments involving works to upstanding archaeological sites and features or works to the historic building stock include an assessment of the presence of bats in any such sites or structures and, where appropriate, ensure that suitable avoidance and/ or mitigation measures are proposed to protect bats in consultation with the National Parks and Wildlife Service.*
Objective DMSO154 – ecological Corridors	*Protect and enhance the ecological corridors along the following rivers in the County by ensuring that no development takes place, outside, development boundaries within a minimum distance of 48m from each riverbank along the main channels of following rivers Liffey, Tolka, Pinkeen, Mayne, Sluice, Ward, Broadmeadow, Ballyboghil, Corduff, Matt and Delvin, Bracken River, Daws River, Richardstown River, Turvey River (see Green Infrastructure Maps). A minimum 10 m wide riparian buffer strip applies to lands within development boundaries. Additional width may be required to provide for additional protections of sensitive habitats, as appropriate.*
Objective DMSO155 – ecological Corridors in Urban Areas	*Any redevelopment of existing properties and brownfield sites within 25m from each riverbank along the main channels of following rivers Liffey, Tolka, Pinkeen, Mayne, Sluice, Ward, Broadmeadow, Ballyboghil, Corduff, Matt and Delvin, Bracken River, Daws River, Richardstown River, Turvey River shall provide opportunities for multi-functional green infrastructure, including features which intercept and filter surface water from the site before discharging into the river. These features include, but are not limited to: green roofs, reinforced grass parking bays and water gardens. The use of underground attenuation as part of the redevelopment of existing properties or brownfield sites will not be accepted.*

Policy/Objective	Description
Objective DMSO156 – Development Along watercourses	*Ensure that no development, including clearance and storage of materials, takes place within 10m as a minimum, measured from each bank of any river tributary or small stream or watercourse in the County (see Green Infrastructure Maps).*
Objective DMSO157 – Urban Ecological Corridors	*Protect, develop and enhance terrestrial urban ecological corridors along existing linear features such as hedgerows where possible with a minimum corridor width of 25 m. These corridors comprise of a mixture of hedgerow, scrub, rank grassland, wildflower meadow, ponds, marshland and dead timber. SuDS features such as ponds and wetlands can be incorporated within these corridors. Green corridors should be incorporated into all new large developments, as part of multifunctional Green Infrastructure provision, linking large areas of open space and linking with areas outside the development site*
Objective DMSO158 – Protection of Rivers and Streams	*Protect rivers and streams and maintain them in an open state capable of providing suitable habitat for fauna and flora, including fish. Deculvert or 'daylight' existing culverts where appropriate and in accordance with relevant river catchment proposals restore the watercourse to acceptable ecological standards for biodiversity wherever possible improving habitat connection and strengthening the County's green infrastructure network. Clear span structures should be used on fisheries waters, where possible*
Objective DMSO159 – Inclusion of Mammal ledges or Tunnels	*Protect the ecological corridor function along rivers by including mammal ledges or tunnels in new bridges over any of the main rivers: Liffey, Tolka, Pinkeen, Mayne, Sluice, Ward, Broadmeadow, Ballyboghil, Corduff, Matt and Delvin. New bridge structures will also cater for Dipper boxes and Bats where possible. Where new road infrastructure crosses significant urban ecological corridors, tunnels shall be installed underneath the road to facilitate movement of small mammals and amphibians.*
Objective DMSO162 – Landscape / Visual Assessment	*Require a landscape/Visual assessment to accompany all planning applications for significant proposals that are likely to affect views and prospects.*
Objective DMSO169 – Archaeological Impact Assessment	*All development proposals which may have implications for archaeological heritage shall be accompanied by an Archaeological Impact Assessment. This assessment will consist of the following:* - *Site inspection/walk-over survey,* - *Archaeological heritage of the receiving area,* - *Examination of upstanding or visible features or structures,* - *Topographical assessment including historic townland boundaries,*

Policy/Objective	Description
	- *Physical description and photographic record of the archaeological feature, site or object,* - *Examination of existing or new aerial photographs or satellite or other remote sensing imagery* - *Geophysical survey, archaeological test excavation, where appropriate, which should be carried out by suitable qualified professionals (geophysicists and archaeologists),* - *Identification of potential direct and in-direct impacts of the proposed development on archaeological remains,* - *Identification of climate change vulnerability,* - *Mitigation measures to ameliorate any such impacts of the proposed development on the definition of the buffer area surrounding the monument which will preserve the setting and visual amenity of the site,* - *Provision of details on protection measures to be used on site.*
Objective DMSO210 – Riparian Corridors	*Establish riparian corridors free from new development along all significant watercourses and streams in the County:* - *Ensure a minimum 10 m wide riparian buffer strip measured from the top of the bank either side of all watercourses. This minimum 10m wide riparian buffer strip applies to lands within development boundaries – i.e. within designated settlement boundaries (as per Fingal County Council's Settlement Hierarchy set out in Chapter 2, Planning for Growth, Table 2.20: Fingal Settlement Hierarchy).* - *A minimum 48m wide riparian buffer strip is required in all other areas outside of development boundaries.* - *Where lands encompass urban and rural areas, a transitional approach from the urban riparian requirements to the rural riparian requirements may be appropriate and will be assessed on a case-by-case basis.* - *Notwithstanding the above, cognisance must be taken of Flood Zone A and B, as outlined in the accompanying SFRA.* *See also Chapter 14, Development Management Standards (Section 14.20.5 Riparian Corridors) and the SFRA.*
Objective DMSO212 – OPW Flood Risk Management Guidelines	*Have regard to the OPW Flood Risk Management Guidelines 2009, as revised by Circular PL 2/2014, when assessing planning applications and in the preparation of statutory and non-statutory plans and to require site specific flood risk assessments be considered for all new developments within the County. All development must prepare a Stage 1 Flood Risk Analysis and if the flooding risk is not screened out, they must*

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	prepare a Site Specific Flood Risk Assessment (SSFRA) for the development, where appropriate.
Objective DMSO215 – Precautionary Principle and Flood Risk	*Require all developments in the County to be designed and constructed in accordance with the Precautionary Principle as detailed in the OPW Guidelines and to minimise the flood risk in Fingal from all potential sources of flooding as far as is practicable, including coastal, pluvial, fluvial, reservoirs and dams, and the piped water system.*
Objective DMSO236 – Segregation and Collection of Waste	*Ensure all new large-scale residential and mixed-use developments include appropriate facilities for source segregation and collection of waste.*
Objective DMSO241 - Construction and Demolition Waste Management Plans	*Require that Construction and Demolition Waste Management Plans be submitted as part of any planning application for projects in excess of any of the following thresholds:* - *New residential development of 10 units or more.* - *New developments other than above, including institutional, educational, health and other public facilities, with an aggregate floor area in excess of 1,250 sqm.* - *Demolition / renovation / refurbishment projects generating in excess of 100m3 in volume of C&D waste.* - *Civil engineering projects in excess of 500m3 of waste materials used for development of works on the site.*
Objective DMSO243 – Construction Noise	*Where development sites adjoin residential properties, the Planning Authority shall restrict the operation of equipment or machinery (to include pneumatic drills, construction vehicles, generators, etc.) on or adjacent to the site before 07.00 hours on weekdays and 09.00 hours on Saturdays, after 19.00 hours on weekdays and 13.00 hours on Saturdays and at any time on Sundays, Bank Holidays or Public Holidays.*

11 Monitoring Measures

The existing provisions of the Fingal Development Plan 2023–2029 relating to monitoring measures remain in place and continue to be valid. No new, revised, or additional monitoring measures are proposed or required as part of this Variation, as the current measures are considered sufficient to assess the implementation and effects of the Plan.

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