

# SEA ENVIRONMENTAL REPORT APPENDIX II – NON-TECHNICAL SUMMARY

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FOR THE

## DRAFT WICKLOW TOWN-RATHNEW LOCAL AREA PLAN 2025

for: Wicklow County Council



by: CAAS Ltd.



OCTOBER 2024

## Table of Contents

<b>Section 1</b>	<b>Introduction and Terms of Reference .....</b>	<b>1</b>
<b>Section 2</b>	<b>The Draft Plan.....</b>	<b>4</b>
2.1	Introduction and Content.....	4
2.2	Plan Format.....	4
2.3	Plan Vision .....	4
2.4	Strategic work undertaken by the Council to ensure evidence-based planning .....	5
2.5	Relationship with other relevant Plans and Programmes .....	5
<b>Section 3</b>	<b>The Environmental Baseline.....</b>	<b>6</b>
3.1	Introduction .....	6
3.2	Likely Evolution of the Environment in the Absence of the Draft Plan.....	6
3.3	Biodiversity and Flora and Fauna .....	6
3.4	Population and Human Health.....	7
3.5	Soil.....	8
3.6	Water .....	9
3.7	Air and Climatic Factors .....	14
3.8	Material Assets .....	15
3.9	Cultural Heritage.....	16
3.10	Landscape.....	17
3.11	Strategic Environmental Objectives.....	17
<b>Section 4</b>	<b>Alternatives .....</b>	<b>19</b>
4.1	Introduction .....	19
4.2	Limitations in Available Alternatives .....	19
4.3	Alternatives Description and Assessment Summary .....	19
4.4	Selected Alternative for the Plan.....	25
<b>Section 5</b>	<b>Summary of Effects arising from Plan.....</b>	<b>27</b>
<b>Section 6</b>	<b>Mitigation and Monitoring Measures .....</b>	<b>32</b>
6.1	Mitigation.....	32
6.2	Monitoring.....	32

## Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for the Wicklow Town-Rathnew Draft Local Area Plan (LAP) 2025. The purpose of the Environmental Report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan. The Environmental Report has been prepared as part of a Strategic Environmental Assessment (SEA) process for the Plan.

### What is SEA?

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

### Why is SEA needed? The Benefits

SEA is the Council's and the public's guide to what are generally the best areas for development in the Plan area.

SEA enables the Council to direct development towards robust, well-serviced and connected areas in the Plan area – thereby facilitating the general avoidance of incompatible development in the most sensitive, least well-serviced and least well-connected areas, in the Plan area and beyond.

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

An overlay of individual environmental sensitivities (those summarised under Section 3 of this report) for the Plan area is shown at Figure 1.1. The mapping shows that environmental sensitivities are not evenly distributed throughout the Plan area. Most of the Plan area is identified as having low to moderate levels of sensitivity.

The most sensitive areas in the Plan area include:

- Certain locations and areas within the existing built-up footprint of Wicklow Town and Rathnew Village, mainly on account of cultural heritage designations, including entries to the Record of Monuments and Places, Entries to the Record of Protected Structures and Architectural Conservation Areas; and
- Coastal areas and estuarine areas, including the Murrough and Wicklow Head, and areas adjacent to rivers and streams – mainly on account of ecological and visual sensitivities and elevated levels of flood risk.

The Plan directs incompatible development away from the most sensitive areas in the Plan area and focuses on directing compact, sustainable development within the existing envelope of the Plan area. Development of these generally more robust, well-serviced and well-connected areas of the Plan area will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

Compact development can be accompanied by placemaking initiatives to enable the Plan area to become a more desirable place to live – so that it maintains populations and services.

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

### **How does the SEA work?**

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

The SEA was scoped in consultation with designated environmental authorities.

### **What is included in the Environmental Report that accompanies the Plan?**

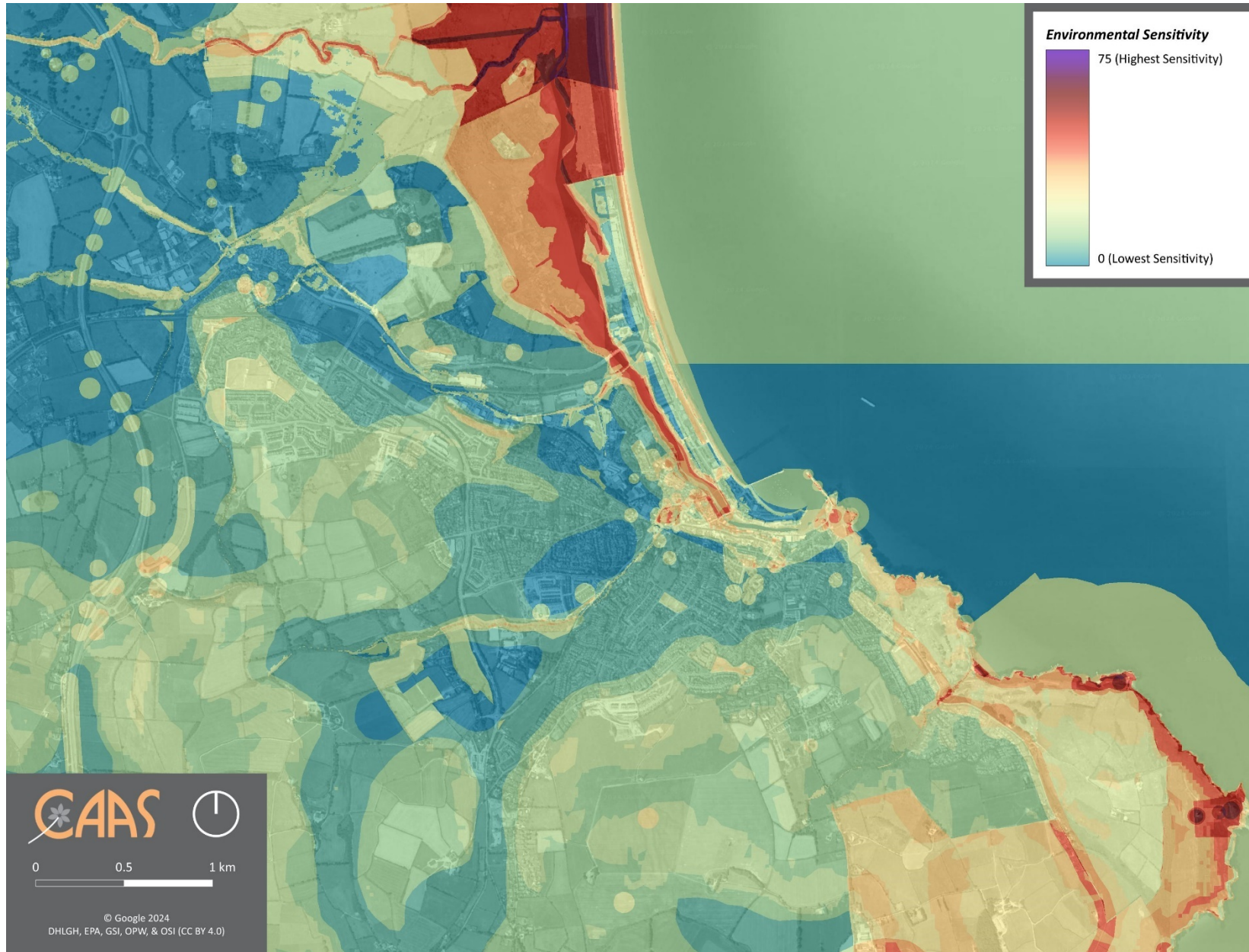
- A description of the environment and the key environmental issues;
- A description and assessment of alternatives for the Plan;
- An assessment of the provisions of the Plan; and,
- Mitigation measures, which will avoid/reduce the environmental effects of implementing the Plan and will contribute towards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

### **Difficulties Encountered during the SEA process**

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

### **What happens at the end of the process?**

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



**Figure 1.1 Environmental Sensitivities that the Plan directs incompatible development away from**

## Section 2 The Draft Plan

### 2.1 Introduction and Content

The Draft Wicklow Town-Rathnew Local Area Plan 2025 has been prepared pursuant to Section 20 of the Planning and Development Act 2000 (as amended).

The purpose of the Plan is to put in place a land use framework that will guide the future sustainable development of the Wicklow Town-Rathnew area. The Plan, in conjunction with the County Development Plan, will inform and manage the future development of the area.

### 2.2 Plan Format

The Plan comprises a written statement and a series of maps that provide a graphic representation of the content of the written text. Where there is any discrepancy between the text and maps, the text shall take precedence.

The Plan is accompanied by a number of appendices, including this SEA Environmental Report. All of these documents have informed the crafting of the Plan.

The Plan sets out an Overall Vision and Strategy followed by objectives under the following headings:

- Residential development
- Economic development
- Key regeneration areas
- Centres and Retail
- Community development
- Tourism
- Infrastructure
- Heritage, Biodiversity and Green Infrastructure
- Zoning and Land Use

### 2.3 Plan Vision

A key aim of a Local Area Plan is to set out the vision and development strategy for the future development of the area and from this vision, all policies and objectives can be developed and implemented with the overall aim of achieving this vision. The vision and development strategy must be consistent with the 'Core Strategy' of the County Development Plan and reflect the characteristics, strengths and weaknesses of the area.

With healthy placemaking, climate change and economic opportunity to the fore of the Plan, the vision for the Wicklow Town-Rathnew Local Area Plan is:

"For Wicklow Town-Rathnew to be a prosperous and growing community in the Garden County of Wicklow, offering a unique and high quality of life by providing for a sustainable and local work/life balance within a healthy environment for all who live, work and visit the settlement.

To strengthen and consolidate Wicklow Town as the County Town.

To protect the identity of Rathnew village.

To recognise and protect, the unique character, built heritage, seaside location, maritime history and natural environment of the area."

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

In preparing the Draft Plan, information relating to various sectors, from different Departments within the Councils and from different bodies and organisations, was gathered and analysed, contributing towards the development of evidence-led Plan provisions. This work included undertaking a Local Transport Assessment (Draft Plan Appendix 1) and a Social Infrastructure Audit (Draft Plan Appendix 2) and preparing details on an Infrastructure Delivery Schedule, Phasing and Implementation (Draft Plan Appendix 3).

The undertaking of the SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as summarised in Section 6 of this report.

## **2.5 Relationship with other relevant Plans and Programmes**

It is important to note that when reading the Plan, the policy objectives of the County Development Plan are relevant and, in this regard, both documents should be read in tandem with each other. As detailed at the beginning of the Plan:

“This Local Area Plan is consistent with the objectives of the Wicklow County Development Plan. The County Development Plan sets out the overall strategies, objectives and standards for the county. The strategies, objectives and standards set out in the Wicklow County Development Plan apply directly in this settlement and shall be complied with throughout the implementation of this Local Area Plan.”

The Draft Plan sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, tourism, environmental protection and environmental management. The Plan must comply with relevant higher-level strategic actions and will, in turn, guide lower-level strategic actions. These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework<sup>1</sup> sets out Ireland’s planning policy direction for the years 2018-2040. The National Planning Framework is to be implemented through Regional Spatial and Economic Strategies and lower tier Development Plans and Local Area Plans. The Regional Spatial and Economic Strategy for the Eastern and Midland Region sets out objectives for land use planning, tourism, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must, as relevant and appropriate, be implemented through the Wicklow County Development Plan, that sets out the overarching development strategy for the County, and the Local Area Plan.

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

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<sup>1</sup> At the time of writing this report, a process to provide a First Revision to the National Planning Framework is underway.

## Section 3 The Environmental Baseline

### 3.1 Introduction

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

### 3.2 Likely Evolution of the Environment in the Absence of the Draft Plan

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

As a result, there would be both:

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

### 3.3 Biodiversity and Flora and Fauna

Key ecological sensitivities within and surrounding the Plan area include:

- Sites designated adjacent to the Plan area, comprising:
  - The Murrough Special Area of Conservation (SAC)<sup>2</sup> - sensitive features of this site include: annual vegetation of drift lines; perennial vegetation of stony banks; Atlantic salt meadows; Mediterranean salt meadows; calcareous fens; and alkaline fens;
  - The Murrough Wetlands Special Protection Area (SPA)<sup>3</sup> - sensitive features of this site include: red-throated diver; greylag goose; light-bellied brent goose; wigeon; teal; black-headed gull; herring gull; little tern; and wetland and waterbirds;
  - Wicklow Head SPA - sensitive features of this site include kittiwake; and
  - Wicklow Reef SAC - sensitive features of this site include reefs.

SACs and SPAs are mapped at Figure 3.1.

- Non-statutorily proposed sites partially within/ adjacent to the Plan area, comprising:
  - The Murrough proposed Natural Heritage Area (pNHA)<sup>4</sup> - this wetland site provides an important flood control role and supports a range of coastal and freshwater habitats, some of which contain threatened flora and fauna;
  - The Wicklow Town Sites pNHA - this site comprises the Leitrim River (river bank) and Black Castle (landward side of the cliffs); and
  - Wicklow Head pNHA - sensitive features of this site include kittiwake.
- Locally important, non-designated habitats within the Plan area, including coastal, transitional and marine areas, various woodlands, parks, gardens, hedgerows, old buildings/stone walls and lands used for agriculture within and surrounding the Plan area, providing habitats for flora and fauna and facilitating linkages and corridors to the surrounding countryside for the wildlife; and

<sup>2</sup> SACs have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. The European Communities (Birds and Natural Habitats) Regulations 2011 consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010. The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

<sup>3</sup> SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - due to their conservation value for birds of importance in the EU.

<sup>4</sup> Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. Proposed NHAs (pNHAs) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated.



- Aquatic and riverine ecology associated with rivers and streams and their tributaries and riparian buffer zones, including the River Leitrim, River Vartry, Burkeen Stream, Rathnew Stream, Marlton Stream and Dunbur Stream. The River Vartry to the north of the Plan area is an important Salmonid River.

Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. The CORINE 2018<sup>5</sup> mapping (shown on Figure 3.2) identifies the land cover of central parts of the Plan area as urban fabric with adjacent areas of industrial or commercial units, port areas, sport and leisure facilities and road and rail networks and surrounding lands identified as pastures, non-irrigated arable land and complex cultivation patterns. Areas of coastal lagoon, salt marshes and inland marshes are identified along the coastal parts of the Plan area. Categories from CORINE mapping that may indicate areas with the potential for sensitive 'Annex I habitats' identified by the EU Habitats Directive partially situated within and adjacent to the Plan area comprise coastal lagoons and marshes.

### Existing Problems

Ireland's Article 17 report on the Status of EU Protected Habitats and Species in Ireland (DCHG, 2019) identifies various Irish, EU-protected habitats and species to be of unfavourable status and many to be still declining, although it also identifies that a range of positive actions are underway. Ireland's Article 12 Birds Directive Reports and the 6<sup>th</sup> National Report under the Convention of Biological Diversity identify similar issues.

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

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

## 3.4 Population and Human Health

The results of Census 2022 within the CSO settlement boundary of Wicklow Town-Rathnew recorded a population of 16,500 persons.

The Core Strategy in Wicklow County Development Plan 2022-2028 (as varied) provides for a population growth in Wicklow Town-Rathnew up to 18,515 persons by 2028 and 19,400 persons by 2031.

Wicklow Town-Rathnew is a 'Core Region Key Town' as identified in the Regional Spatial and Economic Strategy. The settlement's role and function is as follows:

- The County Town;
- Home to a Healthy Community;
- A Major Employment Hub;
- Provides Primary, Secondary and Tertiary Education;
- Provides Higher Order Health;
- Facilitates An Active Regional Port and Harbour;
- A Recreational and Tourism Hub;
- An Attractive Retail Town Centre;
- Provides Social and Community; Facilities; and
- A Base for Public Transport.

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

- Recreational and development pressure on habitats and landscapes;
- Contribution towards increase in demand for waste water treatment at the municipal level;

<sup>5</sup> The CORINE (Co-ordinated Information on the Environment) land cover data series was devised as a means of compiling geo-spatial environmental information in a standardised and comparable manner. CORINE has become a key data source for informing environmental and planning policy on a national and European level. The main land cover type in Ireland is agricultural land including forestry, which accounts for two-thirds of the national landmass. Most of this is permanent grassland pastures. Peatlands and wetlands are the second most widespread land cover type, covering almost one-fifth of the country. While forested areas cover about one-tenth of the country. Despite rapid development in the past two decades, Ireland's landscape is predominantly rural and agricultural.

- Contribution towards increase in demand for water supply and associated potential impact of water abstraction;
- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

Human health has the potential to be impacted upon by environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan.

### Existing Problems

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

Parts of the Plan area are vulnerable to adverse effects from changes in the occurrence of severe rainfall events and associated flooding from surface water. Flooding in certain circumstances could pose a risk to human health. There is historic and predictive evidence of flooding within the Plan area.

## 3.5 Soil

Main soil types surrounding the built-up areas<sup>6</sup> of Wicklow Town-Rathnew are: brown earths (well-drained mineral soils, associated with high levels of natural fertility); and alluvial soils (associated with alluvial clay, silt or sand river deposits). An area of outcropping rock is identified partially within the south-east of the Plan area at Wicklow Head.

Geological Survey Ireland coordinate the Irish Geological Heritage Programme, whereby an objective has been set to identify and select sites of geological interest within each county across the country. County Geological Sites (CGSs) do not receive statutory protection like Natural Heritage Areas but receive an effective protection from their inclusion in the planning system. The audit of CGSs in County Wicklow was completed in 2014, which identified 62 CGSs in County Wicklow. There is one designated County Geological Site occurring partially within the north of the Plan area, namely Wicklow-Greystones Coast CGS (Site Code: WW060).

A number of previous landslide events have been recorded within the northern parts of the Plan area<sup>7</sup>. The GSI have identified the Plan area as having mainly low, moderately low and moderately high levels of landslide susceptibility.

In the absence of mitigation, contaminated materials have the potential to adversely impact upon human health, water quality and habitats and species. As is the case with other urban, semi-urban and port areas across the country, there is potential for contamination at sites within the Plan area, especially where land uses occurred in the past, in the absence of environmental protection legislation.

Following a coastal protection study carried out in 2007, covering the area between Five Mile Point and Wicklow Pier, coastal erosion in this area was found to be significant. Limited intervention undertaken on foot of this study involved works to protect the existing railway bridge and the Port Access Road Bridge.

In 2013, the OPW completed the Irish Coastal Protection Strategy Study, which provides a strategic assessment of the extent of coastal erosion and coastal flooding along the south-east coastline of the County. The East Coast Erosion Study, commissioned by Irish Rail and completed in 2020 further recommends the use of offshore islands and beach nourishment for soft coastline and extension and enhancement of the existing coastal protection works.<sup>8</sup>

<sup>6</sup> The built-up areas are mainly made up of urban soils. Urban soils are soils, which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas.

<sup>7</sup> Wicklow Town Parish Church (c.1990); Bollarney, Train Station Wicklow Town minor event on railway line north of Inch County Wicklow (2009); Vartry River landslide, Wicklow Town, large landslide of the east facing valley slope, partially blocking the river (2015).

<sup>8</sup> Draft Wicklow Town-Rathnew Local Area Plan 2025

### 3.6 Water

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

Surface water at and around the Plan area is channelled by rivers, streams and their tributaries. The Plan area is traversed by the Vartry River and the Rathnew, Burkeen, Dunbur and Marlton Streams and associated tributaries, flowing from west to east towards the Irish Sea.

The Murrough wetlands are centred around Broad Lough, immediately north of Wicklow town. This coastal wetland complex stretches for 15 km from Ballygannon to north of Wicklow Town, and in parts, extends inland for up to 1 km. Broad Lough is a large estuarine lake that is cut off from the Irish Sea by a long, thin shingle ridge, which carries the mainline Dublin-Wexford railway. Various rivers and streams flow into Broad Lough to the north of Wicklow Town, including the Vartry River and the Rathnew Stream.

The current WFD (2016-2021) status<sup>9</sup> of the rivers and streams draining the Plan area is:

- *moderate* (identified by the EPA as 'Vartry\_040');
- *good* (identified by the EPA as Rathnew Stream\_010, Wicklow\_010, Inchanappa\_010, Three Mile Water\_010, and Kilpoole Lower\_010); and
- *high* (identified by the EPA as Three Mile Water\_020).

The status of the transitional water body (2016-2021) of Broad Lough within the Plan area is identified as *moderate*.

The status of coastal water bodies (2016-2021) within and adjacent to the Plan area is identified as being *high* (identified by the EPA as Southwestern Irish Sea – Killiney Bay).

Subject to exemptions provided for by Article 4 of the WFD, some of these water bodies will need improvement in order to comply with the objectives of the WFD.

The transitional water body of Broad Lough is currently identified in the combined 2016-2021 data as being at risk of not meeting the WFD's objectives due to damage caused by significant pressures related to<sup>10</sup>:

- **Agricultural pressures**, which may include issues related to farming including loss of excess nutrients and sediment loss to surface waters from diffuse sources such as spreading of fertilisers and manures. Excess phosphorous and sediment are typically issues for rivers and lakes, and too much nitrogen is the main issue for estuaries and coastal waters; and
- **Urban run-off pressures**, which can include leaking sewers and run-off from paved and unpaved areas and misconnections where private foul connections are connected to storm sewers instead of the foul sewer network.

Figure 3.3 illustrates the WFD surface water status within and surrounding the Plan area.

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

A Strategic Flood Risk Assessment (SFRA) document accompanies this SEA Environmental Report and the Draft Plan. Requirements in relation to SFRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of Environment and Office of Public Works, 2009) and associated Department of the Environment, Community and Local Government Circular PL2/2014. Flood risk management and drainage provisions are already in force through the Wicklow County Development Plan 2022-2028 (as varied) and related provisions have been integrated into the LAP. In addition, land use zoning contained within the Draft Plan has been informed by the SFRA process and associated delineation of flood risk zones. Historical flooding is documented by the Office of Public Works. Recurring flood events are identified within the Plan area. Predictive flood risk mapping is also available from the Office of Public Works. The most significant source of flood risk within the Plan area is from fluvial

<sup>9</sup> As per EPA's WFD Status 2016-2021 classification (<https://gis.epa.ie/EPAMaps/>).

<sup>10</sup> <https://gis.epa.ie/EPAMaps/Water>

(from rivers and streams) and coastal sources. There are other sources of flooding present including from pluvial (rainwater) and from surface drainage systems sources.

### **Existing Problems**

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

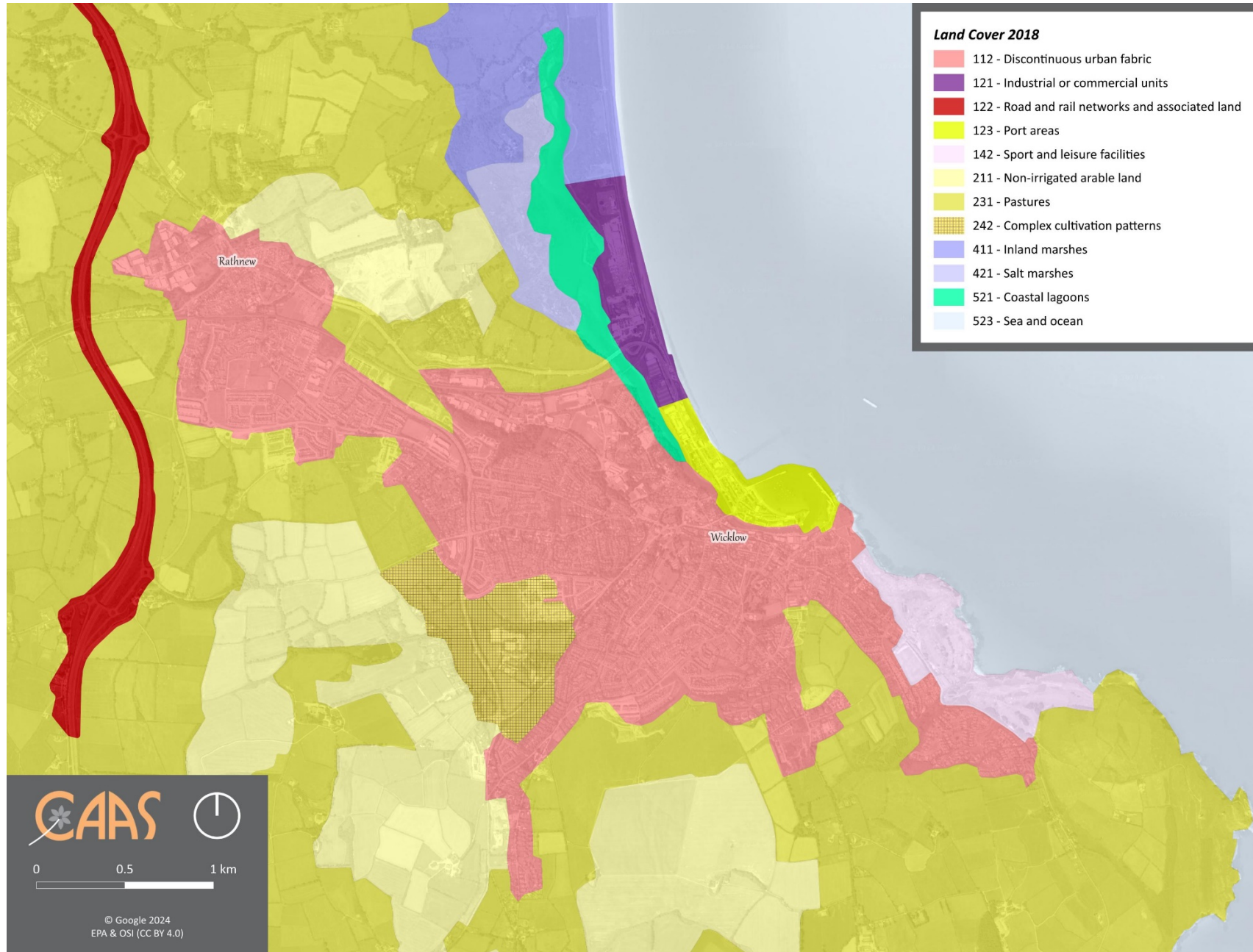
There is elevated levels of flood risk from fluvial and coastal sources at various locations across the Plan area. The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA.





**Figure 3.1 European Sites within and within 15 km buffer of the Plan area**  
CAAS for Wicklow County Council





**Figure 3.2 CORINE Land Cover Mapping 2018**

CAAS for Wicklow County Council





**Figure 3.3 Surface Water Status (2016-2021)**

CAAS for Wicklow County Council

### 3.7 Air and Climatic Factors

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

In 2023, Ireland's greenhouse gas emissions are estimated to be 55.01 million tonnes carbon dioxide equivalent (Mt CO<sub>2</sub> eq), which is 6.8% lower (or 4.00 Mt CO<sub>2</sub> eq) than emissions in 2022 (59.00 Mt CO<sub>2</sub> eq) and follows a 2.0% decrease in emissions reported for 2022. Emissions are 1.2% below the historical 1990 baseline for the first time in 33 years. In 2023, emissions in the stationary EU Emissions Trading System emissions (covering emissions from sectors including Agriculture, Transport, Energy, Industries, Residential, Manufacturing Combustion and Industrial Processes) decreased by 17%. When land use, land-use change and forestry is included, total national emissions decreased by 3.8%. Emissions under the Effort Sharing Regulation (covering emissions from the electricity and heat generation, industrial manufacturing and aviation sectors) decreased by 3.4%. Decreased emissions in 2023 compared to 2022 were observed in the largest sectors except for transport which showed an increase of 0.3%.

The Wicklow Climate Action Plan 2024-2029 provides information on the breakdown of emissions from County Wicklow:

- In 2018, the baseline year, Ireland's national greenhouse gas emissions were approximately 70,235 ktonnes CO<sub>2</sub> eq.
- Emissions within the Wicklow County Council area are estimated to have been 1,101 ktonnes CO<sub>2</sub> eq in 2018.
- Of total emission in County Wicklow, the agriculture sector accounted for 40%, the residential sector for 25%, the transport sector for 24%, the Commercial and Public Sector for 9%, the Municipal sector for 1% and the Waste sector for 1%.

Climate mitigation describes the action to reduce the likelihood of climate change occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change. The National Climate Action Plan 2024 is the second statutory update to the plan since the Climate Action and Low Carbon Development (Amendment) Act 2021 was signed into law, committing Ireland to 2030 and 2050 targets for reducing greenhouse gas emissions. It builds on Climate Action Plan 2023, outlining how Ireland will accelerate the actions required to respond to the climate crisis, putting climate solutions at the centre of Ireland's social and economic development.

Climate adaptation is a change in natural or human systems in response to the impacts of climate change. These changes moderate harm or exploit beneficial opportunities and can be in response to actual or expected impacts. The National Adaptation Framework (2024) aims to create a unified approach involving both government and society to adapt to climate change. It outlines how various sectors and local authorities can implement adaptation measures to minimise Ireland's vulnerability to climate change's adverse effects while taking advantage of any beneficial impacts. The Framework emphasises the importance of integrating adaptation strategies into all levels of policy making, infrastructure development, and local planning.

The Wicklow Climate Action Plan 2024-2029 will contribute towards addressing the mitigation of greenhouse gas emissions, climate change adaptation, and strengthening the alignment between national climate policy and the delivery of local climate action. The local objectives of Wicklow County Council's Climate Action Plan 2024-2029 are grouped under five thematic areas as follows:

- Governance and Leadership
- Built Environment and Transport
- Natural Environment and Green Infrastructure
- Communities: Resilience and Transition
- Sustainability and Resource Management

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

- Air quality in Ireland is generally good, however, there are concerning localised issues.
- Ireland met all of its EU legal requirements in 2022 but it did not meet the more stringent health-based World Health Organisation (WHO) Air Quality guidelines.
- Fine particulate matter (PM<sub>2.5</sub>) from solid fuel combustion and nitrogen dioxide (NO<sub>2</sub>) from vehicle emissions are the main pollutants.
- It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from PM<sub>2.5</sub>.



- The choices people make in how they heat their homes and how they travel directly impact the quality of the air they breathe.
- Ireland's ambition in the Clean Air Strategy is to move towards the WHO Air Quality guidelines.

The report further identifies the critical role of local authorities in the enforcement and implementation of existing plans and investment in infrastructure to encourage cleaner and healthier air quality choices, including:

- Local authorities must provide more resources to increase air enforcement activities and implement the new solid fuel regulations.
- Investment in clean public transport infrastructure across the country must be maintained and increased.
- More safe footpaths and cycle lanes must be created to continue to increase active travel as a viable and safe alternative to car use and associated NO<sub>2</sub> emissions.

### **Existing Problems**

Significant progress is being made in the reduction of Ireland's greenhouse gas emissions. The EPA's 2024 publication Ireland's Greenhouse Gas Emission Projections 2023-2040 identifies that Ireland's emissions, under the Emissions in the 'Planned Additional Measures' scenario, which includes most 2024 Climate Action Plan measures, are projected to be 29% lower in 2030 (compared with 2018). However, this would not meet the 51% emissions reduction target (by 2030 compared to 2018) based on these projections.

In the Climate Change Advisory Council's *Annual Review 2024*, the findings of an assessment of the degree to which progress is being made solely in the implementation of adaptation policy and increasing resilience for the period April 2023 to March 2024 is provided. The Review details that four sectors (Transport, Flood Risk Management, Built and Archaeological Heritage and Local Government) demonstrated good overall progress, six showed moderate progress (Agriculture, Forestry and Seafood, National Adaptation Framework, Communications Networks, Water Quality and Water Services Infrastructure, Health and Electricity and Gas Networks) and one (Biodiversity) showed no progress and supplied insufficient evidence. This was a slight improvement compared with the results in 2023.

Air quality and noise can present challenges, especially in urban areas, as detailed under the relevant sub-sections above. With regard to air quality, air pollution from transport is dominated by NO<sub>x</sub> emissions. Of these, NO<sub>2</sub> is particularly impactful from a health perspective. The Draft Plan will help to facilitate reductions in emissions and a transition from dependence on fossil fuel combustion powered transport.

## **3.8 Material Assets**

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

### **Public Assets and Infrastructure**

Public assets and infrastructure that have the potential to be impacted upon by the Plan, if unmitigated, include: the town of Wicklow Town-Rathnew; resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, waste water infrastructure etc.); and natural resources that are covered under other topics such as water and soil.

### **Land**

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

### **Coastline**

The County's coastline, including that which is within and adjacent to the Plan area, is amongst the most sensitive and valuable resources in County Wicklow, in terms of natural and cultural heritage, scenic beauty and recreation. The coast is also an important economic resource - particularly for the fishing, aquaculture, leisure and tourism industries.

## Waste Water

Uisce Éireann, working in partnership with Wicklow County Council, is making investments to undertake essential upgrade works to waste treatment plants in towns and villages across the County. The upgrading of infrastructure will contribute towards compliance with the Water Framework Directive, EU Urban Waste Water Treatment Directive and Drinking Water Regulations and will help to protect human health and maintain the quality of surface and ground waters. The Wicklow WWTP has a design capacity of 34,000 Population Equivalent (PE)<sup>11</sup>, with current load of 19,617 PE.<sup>12</sup> As indicated by Uisce Éireann, there is spare capacity available. The Wicklow WWTP (Registration No. D0012-01) is currently fully compliant with the Emission Limit Values (ELVs) set in the Wastewater Discharge Licence in the most recent available Annual Environmental Report 2023 (published in April 2024).

## Water Supply

Uisce Éireann is responsible for providing and maintaining adequate public water supply infrastructure throughout County Wicklow. Wicklow is located within the Greater Dublin Area Water Resource Zone<sup>13</sup> and as identified by Uisce Éireann, there is capacity available to meet targeted population growth by 2032, although an improvement in level of service is required.<sup>14</sup> The Water Supply Schemes for the Plan area include the Wicklow Regional Water Supply Scheme (WSS). The Wicklow Regional WSS is serviced by Vartry Water Treatment Plant, which produces approximately 4,495 m<sup>3</sup>/day of water, serving a population of 15,598<sup>15</sup>.

## Waste Management

The National Waste Management Plan for a Circular Economy (Regional Waste Management Planning Offices, 2024) sets out a framework for the prevention and management of waste in Ireland for the period 2024 to 2030. The Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

## Transport

Wicklow Town-Rathnew is well served by the M11, which bypasses the area and provides transport links to Dublin, Arklow, Gorey and Wexford. The Plan area is also served by daily trains along the Dublin Connolly – Rosslare Europort line. In addition, bus services are provided by Bus Éireann and Local Link with daily services to Dublin Airport, Glendalough and Arklow. National, regional and local roads provide vital links between Wicklow Town-Rathnew and retail, service and employment centres throughout the County and to adjoining counties. A Local Transport Assessment has been integrated into the Plan to help ensure a shift towards more sustainable modes of transport.

## Existing Problems

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

The provision of infrastructure and supporting services for development, particularly water and wastewater services, is critical.

## 3.9 Cultural Heritage

### Archaeological Heritage

The Record of Monuments and Places is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. It is available from the National Monuments Service and at [archaeology.ie](http://archaeology.ie). There are various entries to Record of Monuments and Places within the Plan area. These Recorded Monuments are identified within Wicklow Town (including along the Varty River and at Wicklow Harbour), along the coast and in the centre of Rathnew village. Parts of the centre of Wicklow Town are identified as an Area of Archaeological Significance or Potential.

<sup>11</sup> Population Equivalent (PE) is a measurement of the organic biodegradable load. A population equivalent of 1 (1 PE) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD<sub>5</sub>) of 60 g of oxygen per day; the load is calculated on the basis of the maximum average weekly load entering the treatment plant during the year, excluding unusual situations such as those due to heavy rain.

<sup>12</sup> [https://www.water.ie/docs/aers/2023/D0012-01\\_2023\\_AER.pdf](https://www.water.ie/docs/aers/2023/D0012-01_2023_AER.pdf)

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

<sup>14</sup> This may take the form of leakage reduction and/or capital investment to maintain/improve levels of service as the demand increases. Proposed solutions will be developed and prioritised through the National Water Resources Plan and investment planning process. <https://www.water.ie/connections/developer-services/capacity-registers/water-supply-capacity-register/wicklow/> (Published in June 2023).

<sup>15</sup> Wicklow County Development Plan 2022-2028 (as varied)

### Architectural Heritage

Protected structures are defined in the Planning and Development Act 2000 as amended as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view. There are a total of 41 entries in the Record of Protected Structures within the Plan area, as set out in Appendix 4 of Wicklow County Development Plan 2022-2028 (as varied). Clusters of architectural heritage are indicated within Wicklow town centre. Notable Protected Structures include: Clermont House, Rathnew Village; Dominican Convent; Black Castle; the Courthouse; Wicklow Gaol; and ecclesiastical buildings such as the Church of Ireland (Wicklow Parish Church at Church Hill) and the Catholic Church (St. Patrick's Catholic Church). Many of these Protected Structures are located within Architectural Conservation Areas (ACAs). An ACA is a place, area, group of structures or townscape, which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or contributes to the appreciation of a Protected Structure. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are currently five ACAs designated within the Plan area, all within Wicklow Town: Town Centre ACA; Leitrim Place ACA; Bachelors Walk and Church Street ACA; Bay View Road ACA; and Brickfield Lane ACA.

### Existing Problems

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

## 3.10 Landscape

Wicklow is a coastal harbour town with neighbouring village of Rathnew situated c. 3 km to the east of the town. The surrounding area is predominantly agricultural land with an area of marshes (the Murrough) to the north of the Plan area. The River Vartry is the main river flowing through Wicklow Town. The eastern coastal strip includes Wicklow Bay and a stone beach. The harbour and the coast provide important recreational and commercial amenities in the Plan area.

There are a range of different landscapes found in the Plan area, each with varying visual and amenity values, topography, exposure levels and each containing a variety of habitats. Each landscape type has varying capacity to absorb development related to its overall sensitivity.

The existing Wicklow County Development Plan 2022-2028 (as varied) identifies 15 Landscape Character Areas within six Landscape Categories across the Council's administrative area. The Plan area is located within the 'Urban Areas' Landscape Category, adjacent to the 'Corridor Areas' and 'Coastal Areas of Natural Beauty' Landscape Categories. The Plan area is located within the 'Urban Areas' Landscape Character Area, adjacent to the 'Coastal Areas Northern and Southern' and 'N11 Corridor Area' Landscape Character Areas. Other landscape designations within the Plan area are:

- Prospects/Views of Special Amenity Value or Special Interest - the views and prospects within the Plan area are mainly views and prospects associated with the coastline; and
- Trees and Woodlands with Existing Preservation Orders - there are four trees/group of trees within the Plan area protected under the Order.

### Existing Problems

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

## 3.11 Strategic Environmental Objectives

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

**Table 3.1 Strategic Environmental Objectives**

Environmental Component	SEO Code	Guiding Principle	Strategic Environmental Objectives
<b>Biodiversity, Flora and Fauna</b>	<b>BFF</b>	No net contribution to biodiversity losses or deterioration	<ul style="list-style-type: none"> <li>To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, particularly EU designated sites and protected species</li> <li>Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated conservation status, structure and function</li> <li>Safeguard national, regional and local designated sites and supporting features which function as stepping stones for migration, dispersal and genetic exchange of wild species</li> <li>Enhance biodiversity in line with the National Biodiversity Strategy and its targets</li> <li>To protect, maintain and conserve natural capital</li> </ul>
<b>Population and Human Health</b>	<b>PHH</b>	Improve quality of life for all ages and abilities based on high-quality, serviced, well connected and sustainable residential, working, educational and recreational environments	<ul style="list-style-type: none"> <li>Promote economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management</li> <li>Ensure that existing population and planned growth is matched with the required public infrastructure and the required services</li> <li>Safeguard citizens from environment-related pressures and risks to health and well-being</li> </ul>
<b>Soil (and Land)</b>	<b>S</b>	Ensure the long-term sustainable management of land	<ul style="list-style-type: none"> <li>Protect soils against pollution, and prevent degradation of the soil resource</li> <li>Promote the sustainable use of infill and brownfield sites over the use of greenfield</li> <li>Safeguard areas of prime agricultural land and designated geological sites</li> </ul>
<b>Water</b>	<b>W</b>	Protection, improvement and sustainable management of the water resource	<ul style="list-style-type: none"> <li>Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the Water Framework Directive</li> <li>Ensure water resources are sustainably managed to deliver proposed regional and County growth targets in the context of existing and projected water supply and wastewater capacity constraints ensuring the protection of receiving environments</li> <li>Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and future erosion, particularly coastal areas</li> <li>Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into development proposals</li> </ul>
<b>Material Assets</b>	<b>MA</b>	Sustainable and efficient use of natural resources	<ul style="list-style-type: none"> <li>Optimise existing infrastructure and provide new infrastructure to match population distribution proposals - this includes transport infrastructure</li> <li>Ensure access to affordable, reliable, sustainable and modern energy for all which encourages a broad energy generation mix to ensure security of supply – wind, solar, hydro, biomass, energy from waste and traditional fossil fuels</li> <li>Promote the circular economy, reduce waste, and increase energy efficiencies</li> <li>Ensure there is adequate sewerage and drainage infrastructure in place to support new development</li> <li>Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport modes</li> <li>Encourage the transition to a zero-carbon economy by facilitating the development of a grid infrastructure to support renewables and international connectivity. Reduce the average energy consumption per capita including promoting energy efficient buildings, retrofitting, smart- buildings, cities and grids</li> </ul>
<b>Air</b>	<b>A</b>	Support clean air policies that reduce the impact of air pollution on the environment and public health	<ul style="list-style-type: none"> <li>To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry and agriculture</li> <li>Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency</li> <li>Promote continuing improvement in air quality</li> <li>Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate matter which are responsible for acidification, eutrophication and ground-level ozone pollution</li> <li>Meet Air Quality Directive standards for the protection of human health – Air Quality Directive</li> <li>Significantly decrease noise pollution and move closer to WHO recommended levels</li> </ul>
<b>Climatic Factors</b>	<b>C</b>	Achieving transition to a competitive, low carbon, climate-resilient economy that is cognisant of environmental impacts	<ul style="list-style-type: none"> <li>To minimise emissions of greenhouse gasses</li> <li>Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure)</li> <li>Contribute towards the reduction of greenhouse gas emissions in line with national targets</li> <li>Promote development resilient to the effects of climate change</li> <li>Promote the use of renewable energy, energy efficient development and increased use of public transport</li> </ul>
<b>Cultural Heritage</b>	<b>CH</b>	Safeguard cultural heritage features and their settings through responsible design and positioning of development	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage
<b>Landscape</b>	<b>L</b>	Protect and enhance the landscape character	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes having regard to the European Landscape Convention

## Section 4 Alternatives

### 4.1 Introduction

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

Five alternatives for the Local Area Plan are identified and considered under a number of different future development scenarios, as follow:

1. Maximum Environmental Protection
2. Sustainable Transportation
3. Compact Growth
4. Housing Market Driven
5. Community Driven

### 4.2 Limitations in Available Alternatives

The Plan is required to be consistent with the existing, already in force, Wicklow County Development Plan 2022-2028 and the Planning and Development Act 2000 (as amended), which specifies various types of objectives that must be provided for by the Plan.

The alternatives available for the Plan are significantly limited by the provisions of higher-level planning objectives, which are not wholly consistent with each other, including those of the National Planning Framework, the Eastern and Midlands Regional Spatial and Economic Strategy, Minister Guidelines and the County Plan. These documents set out various requirements for the content of the Plan, including on topics such as population, land use zoning and proper planning and sustainable development.

### 4.3 Alternatives Description and Assessment Summary

An overall comparative assessment of the alternatives against Strategic Environmental Objectives (see Table 3.1 in subsection 3.11) is provided on Table 4.1. The basis of this assessment is provided under subsections 4.3.1 to 4.3.5 below.

#### 4.3.1 Alternative 1: Maximum Environmental Protection

By limiting development within parts of the Plan area, including those that are most sensitive to development, this alternative would reduce the potential for adverse environmental effects to occur from development within the Plan area<sup>16</sup> (although this potential would remain, albeit to a reduced degree) and benefit the protection and management of following environmental components within the Plan area<sup>17</sup>:

- Biodiversity and flora and fauna (including through application of a buffer around designated sites, the protection of all trees and mature hedgerows and zoning Bride's Head for Natural Areas)

<sup>16</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** • SEO interactions in Table 4.1.

<sup>17</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** • SEO interactions in Table 4.1.

- Population and human health (limiting development in certain locations would reduce potential for interactions with human health)
- Soil (as a result of limiting greenfield development in certain locations)
- Air (limits in increases in traffic as a result of limiting development in certain locations)
- Water (including as a result of limiting development in certain locations and zoning all lands within 50m of watercourses for Natural Areas only)
- Cultural heritage (through restricting additional development to Protected Structures and restricting development at all designated archaeological sites)
- Landscape (including as a result of designating all lands above the 80m contour as Greenbelt, protecting views and prospects with restricted development within the view/ prospect and zoning Bride's Head for Natural Areas).

This alternative would allow for development targets to be met within the Plan area, reducing demand and associated potential for dispersed adverse environmental effects to occur as a result of development occurring outside of the Plan area, in areas that are potentially more sensitive, less well-serviced and less-well connected<sup>18</sup>. As a result, the protection and management of environmental components beyond the Plan area would be benefited<sup>19</sup>.

By allowing for development targets to be met within the Plan area, this alternative would benefit efforts to maximise sustainable mobility (including associated interactions with air, climate mitigation and human health) and infrastructural and services efficiencies (including associated interactions with population) to a moderate degree<sup>20</sup>. New development would have to be accompanied by appropriate levels of infrastructure and services<sup>21</sup>.

### 4.3.2 Alternative 2: Sustainable Transportation

By focusing on delivering travel solutions that support moving people from the private car to the more sustainable modes of walking, cycling and using public transport, and by providing for higher densities, this alternative would benefit efforts to maximise sustainable mobility (including associated interactions with air, climate mitigation and human health) and infrastructural and services efficiencies (including associated interactions with population) to a greater degree<sup>22</sup> and conflict with these efforts to a lesser degree<sup>23</sup>.

Dezoning undeveloped greenfield lands, including parts of the Strategic Land Bank (SLB) that is not within 15-minute walking distance of public transport would reduce the potential for adverse environmental effects to occur from development at these locations<sup>24</sup> (although the potential would remain elsewhere, including as a result of new and enhanced transport infrastructure) and benefit the

<sup>18</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** SEO interactions in Table 4.1.

<sup>19</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **A C S BFF W PHH MA L CH** SEO interactions in Table 4.1.

<sup>20</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>21</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **MA A C PHH** SEO interactions in Table 4.1.

<sup>22</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>23</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **MA A C PHH** SEO interactions in Table 4.1.

<sup>24</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** SEO interactions in Table 4.1.

protection and management of environmental components such as biodiversity and flora and fauna, soil and landscape<sup>25</sup>.

This alternative would allow for development targets to be met within the Plan area, reducing demand and associated potential for dispersed adverse environmental effects to occur as a result of development occurring outside of the Plan area, in areas that are potentially more sensitive, less well-serviced and less-well connected<sup>26</sup>. As a result, the protection and management of environmental components beyond the Plan area would be benefited<sup>27</sup>.

### 4.3.3 Alternative 3: Compact Growth

By allowing for development targets to be met within the Plan area, this alternative would benefit efforts to maximise sustainable mobility (including associated interactions with air, climate mitigation and human health) and infrastructural and services efficiencies (including associated interactions with population) to a moderate degree<sup>28</sup>. New development would have to be accompanied by appropriate levels of infrastructure and services<sup>29</sup>.

Dezoning all undeveloped greenfield lands would reduce the potential for adverse environmental effects to occur from development at these locations<sup>30</sup> (although the potential would remain elsewhere, including as a result of town and village centre development and mixed use, high density residential development at the Murrough) and benefit the protection and management of environmental components such as biodiversity and flora and fauna, soil and landscape<sup>31</sup>.

This alternative would allow for development targets to be met within the Plan area, reducing demand and associated potential for dispersed adverse environmental effects to occur as a result of development occurring outside of the Plan area, in areas that are potentially more sensitive, less well-serviced and less-well connected<sup>32</sup>. As a result, the protection and management of environmental components beyond the Plan area would be benefited<sup>33</sup>.

<sup>25</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** - SEO interactions in Table 4.1.

<sup>26</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** - SEO interactions in Table 4.1.

<sup>27</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **A C S BFF W PHH MA L CH** - SEO interactions in Table 4.1.

<sup>28</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>29</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>30</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** - SEO interactions in Table 4.1.

<sup>31</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** - SEO interactions in Table 4.1.

<sup>32</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PHH S A W L CH** - SEO interactions in Table 4.1.

<sup>33</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **A C S BFF W PHH MA L CH** - SEO interactions in Table 4.1.

### 4.3.4 Alternative 4: Housing Market Driven

As a plan developed from this alternative would be in effect for ten as opposed to six years, a fully comparative evaluation cannot be provided.

By providing for

- a. excesses in zoned land (above current targets) and lower densities of housing development
- b. facilitating increases in car dependency and
- c. providing for community and education, employment and active open space uses on the periphery of the residential zoned land,

this alternative would:

- benefit efforts to maximise sustainable mobility (including associated interactions with air, climate mitigation and human health) and infrastructural and services efficiencies (including associated interactions with population) to a lesser degree<sup>34</sup>; and
- conflict with these efforts to a greater degree<sup>35</sup>.

This alternative would provide zoning for ten years of housing needs, unlike the other alternatives that would make provisions over a six-year lifespan and be reviewed towards the end of this six-year period. Furthermore, demand would be met through lower densities, requiring a greater extent of lands to be zoned for development. The extent of greenfield development provided and the lack of a focus on infill/regeneration development would present a greater potential for adverse environmental effects to occur from such development within the Plan area under this alternative<sup>36</sup> and consequently benefit the protection and management of environmental components such as biodiversity and flora and fauna, soil and landscape, in the Plan area to a lesser degree<sup>37</sup>.

This alternative would allow for development targets to be met within the Plan area, reducing demand and associated potential for dispersed adverse environmental effects to occur as a result of development occurring outside of the Plan area, in areas that are potentially more sensitive, less well-serviced and less-well connected<sup>38</sup>. As a result, the protection and management of environmental components beyond the Plan area would be benefited<sup>39</sup>.

<sup>34</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>35</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>36</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PPH S A W L CH** - SEO interactions in Table 4.1.

<sup>37</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **BFF PPH S A W L CH** - SEO interactions in Table 4.1.

<sup>38</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PPH S A W L CH** - SEO interactions in Table 4.1.

<sup>39</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **A C S BFF W PPH MA L CH** - SEO interactions in Table 4.1.



### 4.3.5 Alternative 5: Community Driven

By focusing on healthy communities, where residents have all necessary facilities and services within short walking/cycling distance of their homes, this alternative would benefit efforts to maximise sustainable mobility (including associated interactions with air, climate mitigation and human health) and infrastructural and services efficiencies (including associated interactions with population) to a greater degree<sup>40</sup> and conflict with these efforts to a lesser degree<sup>41</sup>.

Providing for a strengthened town centre and more opportunity sites for the redevelopment of brownfield sites would help to reduce demand for greenfield development within the Plan area and associated potential for adverse environmental effects to occur from such development<sup>42</sup> (although the potential would remain) and benefit the protection and management of environmental components such as biodiversity and flora and fauna, soil and landscape, especially in peripheral parts of the Plan area<sup>43</sup>.

This alternative would allow for development targets to be met within the Plan area, reducing demand and associated potential for dispersed adverse environmental effects to occur as a result of development occurring outside of the Plan area, in areas that are potentially more sensitive, less well-served and less-well connected<sup>44</sup>. As a result, the protection and management of environmental components beyond the Plan area would be benefited<sup>45</sup>.

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<sup>40</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>41</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **MA A C PPH** SEO interactions in Table 4.1.

<sup>42</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PPH S A W L CH** - SEO interactions in Table 4.1.

<sup>43</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **BFF PPH S A W L CH** - SEO interactions in Table 4.1.

<sup>44</sup> See potentially significant adverse environmental effects, if unmitigated, common to all alternatives in Table 7.3 and **BFF PPH S A W L CH** - SEO interactions in Table 4.1.

<sup>45</sup> See significant positive environmental effects, likely to occur common to all alternatives in Table 7.3 and **A C S BFF W PPH MA L CH** - SEO interactions in Table 4.1.

**Table 4.1 Overall Comparative Assessment of Alternatives against SEOs<sup>46</sup>**

Alternative	Likely to <b>Improve</b> status of SEOs <b>+</b>			Potential <b>Conflict</b> with status of SEOs - likely to be mitigated <b>-</b>		
	to a <b>Greater</b> degree	to a <b>Moderate</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Moderate</b> degree	to a <b>Greater</b> degree
Alternative 1: Maximum Environmental Protection	<b>BFF PHH S W L CH</b> ▪ <b>BFF PHH S W L CH</b> ■■	<b>MA A C PPH</b>		<b>BFF PHH S W L CH</b> ▪ <b>BFF PHH S W L CH</b> ■■	<b>MA A C PPH</b>	
Alternative 2: Sustainable Transportation	<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ■■	<b>BFF PHH S W L CH</b> ▪		<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ■■	<b>BFF PHH S W L CH</b> ▪	
Alternative 3: Compact Growth	<b>BFF PHH S W L CH</b> ■■	<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ▪		<b>BFF PHH S W L CH</b> ■■	<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ▪	
Alternative 4: Housing Market Driven	<b>BFF PHH S W L CH</b> ■■		<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ▪	<b>BFF PHH S W L CH</b> ■■		<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ▪
Alternative 5: Community Driven	<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ■■	<b>BFF PHH S W L CH</b> ▪		<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> ■■	<b>BFF PHH S W L CH</b> ▪	

▪ = These interactions relate to positive effects on the protection and management of the environment within the Plan area (as a result of directing incompatible development away from the most sensitive areas within the Plan area and focusing on directing compact, sustainable development within the existing envelope of the Plan area)

▪ = These interactions relate to the potential for direct adverse environmental effects, if unmitigated (arising from development within the Plan area)

■■ = These interactions relate to positive effects on the protection and management of the environment beyond the Plan area (as a result of providing development within the Plan area)

■■ = These interactions relate to adverse environmental effects, if unmitigated, (arising from development occurring beyond the Plan area)

<sup>46</sup> For more detail on Strategic Environmental Objectives refer to Section 3.11.

## 4.4 Selected Alternative for the Plan

The 'Selected Alternative' for the Plan integrates the following components from the five above evaluated alternative scenarios for the Plan:

- from "Alternative 1: Maximum Environmental Protection"
  - The protection of European Sites (SAC and SPA) and NHAs.
  - The protection of the trees on the Tree Preservation Orders (TPO) list and protect all other mature trees and hedgerows.
  - The protection of watercourses in accordance with Inland Fisheries Ireland 'Planning for Watercourses in the Urban Environment' 2020.
  - The protection of the landscape.
  - The zoning of lands at Brideshead as Natural Areas (OS2).
  - The enhancement of protection of views and prospects.
- from "Alternative 2: Sustainable Transportation"
  - High-density mixed-use zones within 15-minute walking distance of the Train Station.
  - Downzone the Strategic Land Bank (SLB).
  - Include enhanced pedestrian connections throughout the settlement.
    - Include a new pedestrian/cycling bridge crossing over the Leitrim River from the north to the south quay.
    - Include a new pedestrian/cycling bridge crossing over the railway line at the train station connecting the lands to the north to Station Road/ Train Station.
  - Enhanced cycle routes and connections throughout the settlement.
  - Include 'Park and Ride' sites at Junction 16.
- from "Alternative 3: Compact Growth"
  - Downzone the Strategic Land Bank (SLB).
  - All Town Centre/ Village Centre Sites are zoned for high density mixed use.
  - The Murrough (*south*) area is zoned for mixed use including high density residential.
- from "Alternative 4: Housing Market Driven"
  - Provide for extra housing units above that of the Core Strategy on priority 2, on the next best lands (*with strict phasing criteria*).
- from "Alternative 5: Community Driven"
  - Extra lands, above the minimum requirement for new schools are zoned close to residential areas.
  - Extra lands, above the minimum requirement for recreational/ sports / community facilities are zoned for, Community Education (CE) and Active Open Space (AOS) (e.g. for playing pitches, community halls, theatres, cultural facilities, running tracks, landscaped parks, dog parks, all other recreation/ sports. etc).
  - New walking routes / cycling routes are designated throughout the settlement.
  - Extra lands are zoned for employment to facilitate people working locally.
  - There will be additional lands zoned for childcare facilities.
  - The town centre will be strengthened with a larger Town Centre zoning with more opportunity sites for redevelopment of brownfield sites.

These components emerged from the planning/SEA process having regard to both:

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

An assessment of the ‘Selected Alternative’ against SEOs is provided at Table 4.2. The ‘Selected Alternative’ will help to:

- Maximise the provision of land use zoning and the deliverance of associated travel solutions that support moving people from the private car to the more sustainable modes of walking, cycling and using public transport (including associated interactions with air, climate mitigation and human health) and infrastructural and services efficiencies to a greater degree (improving SEO interactions for **MA A C PPH**), conflicting with these to a lesser degree (potentially conflicting SEO interactions for **MA A C PPH**);
- Maximise positive effects on the protection and management of the environment beyond the Plan area as a result of providing development within the Plan area (improving SEO interactions for **BFF PHH S W L CH**), while helping to minimise adverse environmental effects (if unmitigated) arising from development occurring beyond the Plan area (potentially conflicting SEO interactions for **BFF PHH S W L CH**); and
- Maximise positive effects on the protection and management of the environment within the Plan area as a result of directing incompatible development away from the most sensitive areas within the Plan area and focusing on directing compact, sustainable development within the existing envelope of the Plan area (improving SEO interactions for **BFF PHH S W L CH**), while helping to minimise adverse environmental effects (if unmitigated) arising from development occurring within the Plan area (potentially conflicting SEO interactions for **BFF PHH S W L CH**).

**Table 4.2 Assessment of ‘Selected Alternative’ against SEOs<sup>47</sup>**

	Likely to <b>Improve</b> status of SEOs <b>+</b>			Potential <b>Conflict</b> with status of SEOs - likely to be mitigated <b>-</b>		
	to a <b>Greater</b> degree	to a <b>Moderate</b> degree	to a <b>Lesser</b> degree	to a <b>Lesser</b> degree	to a <b>Moderate</b> degree	to a <b>Greater</b> degree
<b>Selected Alternative for the Draft Plan</b>	<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> <b>BFF PHH S W L CH</b>			<b>MA A C PPH</b> <b>BFF PHH S W L CH</b> <b>BFF PHH S W L CH</b>		

▪ = These interactions relate to positive effects on the protection and management of the environment within the Plan area (directing incompatible development away from the most sensitive areas within the Plan area and focusing on directing compact, sustainable development within the existing envelope of the Plan area)

▪ = These interactions relate to the potential for direct adverse environmental effects, if unmitigated (arising from development within the Plan area)

■ = These interactions relate to positive effects on the protection and management of the environment beyond the Plan area (as a result of providing development within the Plan area)

■ = These interactions relate to adverse environmental effects, if unmitigated, (arising from development occurring beyond the Plan area)

<sup>47</sup> For more detail on Strategic Environmental Objectives refer to Section 3.11.  
CAAS for Wicklow County Council

## Section 5 Summary of Effects arising from Plan

Table 5.1 summarises the overall environmental effects arising from Draft Plan provisions. The Plan would contribute towards the proper planning and sustainable development of the Plan area and the wider County and the effects are consistent with those identified by the SEA for the Wicklow County Development Plan 2022-2028. The effects encompass all in-combination/cumulative effects arising from implementation of the Plan. The potentially significant adverse environmental effects (if unmitigated) arising from implementation of the Plan are detailed as are residual effects, taking into account mitigation integrated into both the Draft Plan and the Wicklow County Development Plan – see Section 6.

Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Environmental impacts which occur will be determined by the nature and extent of multiple or individual projects and site-specific environmental factors. Strategic Environmental Objective (SEO) codes are taken from Table 3.1.

Stage 2 Appropriate Assessment (AA) is being undertaken alongside the preparation of the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The AA assesses the effects of the Plan on European Sites designated for certain habitats and species. The emerging conclusion of the AA is that the Draft Plan will not affect the integrity of the Natura 2000 network<sup>48</sup>.

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

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<sup>48</sup> Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be:

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

Table 5.1 Overall Findings –Effects arising from the Plan

Environmental Component	Environmental Effects, in combination with the wider planning framework Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Eastern and Midland RSES, the Wicklow County Development Plan and adjacent Development Plans and lower-tier land use plans.			SEO Codes
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
<b>Biodiversity and Flora and Fauna</b>	<ul style="list-style-type: none"> <li>Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to central locations within the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere in the Plan area and beyond.</li> <li>Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats.</li> <li>Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna.</li> </ul>	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> <li>Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;</li> <li>Habitat loss, fragmentation and deterioration, including patch size and edge effects; and</li> <li>Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds and bats.</li> </ul>	<ul style="list-style-type: none"> <li>Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>Losses or damage to ecology (these would be in compliance with relevant legislation).</li> </ul>	<b>BFF</b>

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Eastern and Midland RSES, the Wicklow County Development Plan and adjacent Development Plans and lower-tier land use plans.			
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
<b>Population and Human Health</b>	<ul style="list-style-type: none"> <li>• Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management.</li> <li>• Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to central locations within the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-serviced lands elsewhere in the Plan area and beyond</li> <li>• Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to central locations within the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>• Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, such as air and water.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential adverse effects arising from flood events.</li> <li>• Potential interactions if effects arising from environmental vectors.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under “Soil”, “Water” and “Air and Climatic Factors” below.</li> </ul>	<b>PHH</b>
<b>Soil</b>	<ul style="list-style-type: none"> <li>• Contribution towards the protection of soils and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to central locations within the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-serviced lands elsewhere in the Plan area and beyond.</li> <li>• Contribution towards the protection of the environment from contamination.</li> </ul>	<ul style="list-style-type: none"> <li>• Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands.</li> <li>• Potential for riverbank and coastal erosion.</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.</li> <li>• Riverbank and coastal erosion will continue to occur naturally over time and is likely to be enhanced by climate change.</li> </ul>	<b>S</b>

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Eastern and Midland RSES, the Wicklow County Development Plan and adjacent Development Plans and lower-tier land use plans.			
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
Water	<ul style="list-style-type: none"> <li>Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to central locations within the Plan area) that have relatively low levels of environmental sensitivities and are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop more sensitive, less well-served lands elsewhere in the Plan area and beyond.</li> <li>Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations.</li> <li>Contribution towards flood risk management and appropriate drainage.</li> </ul>	<ul style="list-style-type: none"> <li>Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology.</li> <li>Increase in flood risk and associated effects associated with flood events.</li> </ul>	<ul style="list-style-type: none"> <li>Any increased loadings as a result of development to comply with the River Basin Management Plan.</li> <li>Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan.</li> </ul>	W
Material Assets	<ul style="list-style-type: none"> <li>Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to central locations within the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the Plan area and beyond.</li> <li>Contribution towards compliance with national and regional water services and waste management policies.</li> <li>Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments.</li> <li>Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth.</li> <li>Contribution towards reductions in average energy consumption per capita including promoting sustainable compact growth, sustainable mobility, sustainable design and energy efficiency.</li> </ul>	<ul style="list-style-type: none"> <li>Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts).</li> <li>Increases in waste levels.</li> <li>Potential impacts upon public assets and infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan.</li> <li>Residual wastes to be disposed of in line with higher-level waste management policies.</li> <li>Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework.</li> </ul>	MA



SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Environmental Effects, in combination with the wider planning framework			SEO Codes
	Effects include in-combination effects that are planned for through the wider planning framework including the NPF and associated NDP, the Eastern and Midland RSES, the Wicklow County Development Plan and adjacent Development Plans and lower-tier land use plans.			
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if unmitigated	Likely Residual Adverse Non-Significant Effects	
<b>Air and Climatic Factors</b>	<ul style="list-style-type: none"> <li>Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to central locations within the Plan area) that are served (or can be more easily served) by infrastructure and services, thereby helping to avoid the need to develop less well-served lands elsewhere in the Plan area and beyond.</li> <li>In combination with other plans, programmes etc., contribution towards the objectives of the wide policy framework relating to climate mitigation and adaptation, and associated contribution towards maintaining and improving air quality and managing noise levels, including through measures relating to: <ul style="list-style-type: none"> <li>Sustainable compact growth;</li> <li>Sustainable mobility, including walking, cycling and public transport;</li> <li>Sustainable design, energy efficiency and green infrastructure.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives.</li> <li>Potential conflicts between transport emissions, including those from cars, and air quality<sup>49</sup>.</li> <li>Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors<sup>50</sup>.</li> <li>Potential conflicts with climate adaptation measures including those relating to flood risk management.</li> </ul>	<ul style="list-style-type: none"> <li>An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable compact growth and sustainable mobility.</li> <li>Interactions between noise emissions and sensitive receptors. Various provisions have been integrated into the Plan to ensure that noise levels at sensitive receptors will be minimised.</li> </ul>	<b>AC</b>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area.</li> <li>Contributes towards protection of cultural heritage within the Plan area by facilitating brownfield development and regeneration.</li> </ul>	<ul style="list-style-type: none"> <li>Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities.</li> </ul>	<ul style="list-style-type: none"> <li>Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation.</li> </ul>	<b>CH</b>
<b>Landscape</b>	<ul style="list-style-type: none"> <li>Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area.</li> </ul>	<ul style="list-style-type: none"> <li>Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.</li> </ul>	<ul style="list-style-type: none"> <li>Landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments that will occur in compliance with the Plan's landscape protection measures.</li> </ul>	<b>L</b>

<sup>49</sup> Although road transport interventions would be likely to result in an overall reduction in traffic flows and associated interactions with air, noise and human health, there would be potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the Plan area and beyond.

<sup>50</sup> Although road transport interventions would be likely to result in an overall reduction in traffic flows and associated interactions with air, noise and human health, there would be potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the Plan area and beyond.

## Section 6 Mitigation and Monitoring Measures

### 6.1 Mitigation

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

Mitigation was achieved through:

- Strategic work undertaken by the Council to ensure evidence-based planning<sup>51</sup>;
- Considering alternatives for the Plan<sup>52</sup>;
- The integration of individual SEA, AA and SFRA provisions into the text of the Local Area Plan; and
- The integration of individual provisions into the text of the existing, already in force, County Development Plan.

### 6.2 Monitoring

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

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<sup>51</sup> In preparing the Draft Plan, information relating to various sectors, from different Departments within the Councils and from different bodies and organisations, was gathered and analysed, contributing towards the development of evidence-led Plan provisions. This work included undertaking a Local Transport Assessment (Draft Plan Appendix 1) and a Social Infrastructure Audit (Draft Plan Appendix 2) and preparing details on an Infrastructure Delivery Schedule, Phasing and Implementation (Draft Plan Appendix 3).

The undertaking of the SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as summarised in Section 6 of this report.

<sup>52</sup> Although strategic alternatives in relation to the content of the Plan were significantly limited for the Plan (see Section 4), as part of the Plan preparation/SEA process alternatives for the Plan were considered. These alternatives were assessed by the SEA process and the findings of this assessment informed the selection of alternatives for the Plan, facilitating an informed choice with respect to the type of Plan that was prepared and placed on public display.

**Table 6.1 Indicators, Targets, Sources and Remedial Action**

Environmental Component	Indicators	Targets	Sources	Remedial Action <sup>53</sup>
<b>Biodiversity, Flora and Fauna</b>	<ul style="list-style-type: none"> <li>Condition of European sites</li> </ul>	<ul style="list-style-type: none"> <li>Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions and to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species</li> <li>Implement and review, as relevant, Local Biodiversity Action Plans</li> <li>Confirmation of compliance with Plan provisions relating to the protection of European Sites and sustaining resources</li> </ul>	<ul style="list-style-type: none"> <li>DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years)<sup>54</sup></li> <li>DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 6 years)<sup>55</sup></li> <li>Internal review of local land use plans</li> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.</li> </ul>
	<ul style="list-style-type: none"> <li>Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted</li> </ul>	<ul style="list-style-type: none"> <li>Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions and to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species</li> <li>Implement and review, as relevant, Local Biodiversity Action Plans</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
	<ul style="list-style-type: none"> <li>SEAs and AAs as relevant for new Council policies, plans, programmes etc.</li> </ul>	<ul style="list-style-type: none"> <li>Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc.</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of new Council policies, plans, programmes etc. under the County Development Plan</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
	<ul style="list-style-type: none"> <li>Status of water bodies</li> </ul>	<ul style="list-style-type: none"> <li>Included under Water below</li> </ul>	<ul style="list-style-type: none"> <li>Included under Water below</li> </ul>	<ul style="list-style-type: none"> <li>Included under Water below</li> </ul>
	<ul style="list-style-type: none"> <li>Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see County Development Plan Chapter 17 “Natural Heritage and Biodiversity”</li> </ul>	<ul style="list-style-type: none"> <li>For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see County Development Plan Chapter 17 “Natural Heritage and Biodiversity”</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
<b>Population and Human Health</b>	<ul style="list-style-type: none"> <li>Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 9 “Economic Development”</li> </ul>	<ul style="list-style-type: none"> <li>Progress in successfully implementing Plan measures relating to the promotion of economic growth as provided for by Chapter 9 “Economic Development”</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of progress on implementing Plan objectives</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> <li>Consultations with DECC</li> </ul>

<sup>53</sup> Where remedial action is required, consultations with government agencies (e.g. DECC, DT, EPA, HSE, NPWS, Regional Assembly, Uisce Éireann) may be undertaken in order to confirm causes of any identified changes in the environment and in order to develop appropriate responses.

<sup>54</sup> Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on European sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

<sup>55</sup> Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on European sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Indicators	Targets	Sources	Remedial Action <sup>53</sup>
	<ul style="list-style-type: none"> <li>Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Review of published information from the Health Service Executive and EPA</li> <li>Internal consultations with the Council's Environment Department</li> </ul>	<ul style="list-style-type: none"> <li>Consultations with the Health Service Executive and EPA</li> </ul>
	<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures</li> <li>Progress in successfully implementing Plan measures relating to active travel</li> </ul>	<ul style="list-style-type: none"> <li>CSO data</li> <li>Internal review of progress on implementing Plan objectives</li> </ul>	<ul style="list-style-type: none"> <li>Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
	<ul style="list-style-type: none"> <li>Number of spatial plans that include specific green infrastructure mapping</li> </ul>	<ul style="list-style-type: none"> <li>Require all local level land use plans to include specific green infrastructure mapping</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of local land use plans</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
<b>Soil (and Land)</b>	<ul style="list-style-type: none"> <li>Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)</li> </ul>	<ul style="list-style-type: none"> <li>Maintain built surface cover nationally to below the EU average of 4% as per the NPF</li> <li>In accordance with National Policy Objectives 3c of the National Planning Framework, a minimum of 30% of the housing growth targeted in any settlement is to be delivered within the existing built-up footprint of the settlement</li> <li>To map brownfield and infill land parcels</li> </ul>	<ul style="list-style-type: none"> <li>EPA Geoportal</li> <li>Compilation of greenfield and brownfield development for the DHLGH</li> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.</li> </ul>
	<ul style="list-style-type: none"> <li>Instances where contaminated material generated from brownfield and infill must be disposed of</li> </ul>	<ul style="list-style-type: none"> <li>Dispose of contaminated material in compliance with EPA guidance and waste management requirements</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission where contaminated material must be disposed of</li> </ul>	<ul style="list-style-type: none"> <li>Consultations with the EPA and Development Management</li> </ul>
	<ul style="list-style-type: none"> <li>Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission</li> </ul>	<ul style="list-style-type: none"> <li>Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
<b>Water</b>	<ul style="list-style-type: none"> <li>Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD</li> </ul>	<ul style="list-style-type: none"> <li>Subject to exemptions provided for by Article 4 of the Water Framework Directive, not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status'</li> <li>Implementation of the objectives of the River Basin Management Plan</li> </ul>	<ul style="list-style-type: none"> <li>EPA Monitoring Programme for WFD compliance<sup>56</sup></li> </ul>	<ul style="list-style-type: none"> <li>Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Uisce Éireann to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.</li> <li>Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Uisce Éireann to achieve the necessary capacity.</li> </ul>

<sup>56</sup> Including monitoring of water quality and nitrogen deposition due to bioenergy and agricultural projects where available

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Indicators	Targets	Sources	Remedial Action <sup>53</sup>
	<ul style="list-style-type: none"> <li>Number of incompatible developments permitted within flood risk areas</li> </ul>	<ul style="list-style-type: none"> <li>Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.</li> </ul>
<b>Material Assets</b>	<ul style="list-style-type: none"> <li>Programmed delivery of Uisce Éireann infrastructure for all key growth towns in line with Uisce Éireann Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated</li> <li>Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan</li> </ul>	<ul style="list-style-type: none"> <li>All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan</li> <li>Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – in combination with other septic tanks – contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive</li> <li>Facilitate, as appropriate, Uisce Éireann in developing water and wastewater infrastructure</li> <li>See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Uisce Éireann to achieve the necessary capacity.</li> </ul>
	<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures</li> <li>Progress in successfully implementing Plan measures relating to active travel</li> </ul>	<ul style="list-style-type: none"> <li>CSO data</li> <li>Internal review of progress on implementing Plan objectives</li> </ul>	<ul style="list-style-type: none"> <li>Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
<b>Air</b>	<ul style="list-style-type: none"> <li>Proportion of journeys made by private fossil fuel-based car compared to previous levels</li> <li>NO<sub>2</sub> (Nitrogen Dioxide), PM10 (particulate matter with diameter of 10 microns or less) and O<sub>3</sub> (Ozone) as part of Ambient Air Quality Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in proportion of journeys made by car compared to previous levels</li> <li>Improvement in Air Quality trends, particularly in relation to transport related emissions</li> <li>Progress in successfully implementing Plan measures relating to sustainable mobility and travel</li> </ul>	<ul style="list-style-type: none"> <li>CSO data</li> <li>EPA Air Quality Monitoring</li> <li>Internal review of progress on implementing Plan objectives</li> </ul>	<ul style="list-style-type: none"> <li>Where proportion of population shows increase in private car use above previous CSO figures, Council will coordinate with the Regional Assembly, DHLGH, DECC and NTA to develop a tailored response. See also entry under Population and human health above</li> </ul>
<b>Climatic Factors</b>	<ul style="list-style-type: none"> <li>Implementation of Plan measures relating to climate reduction targets</li> </ul>	<ul style="list-style-type: none"> <li>For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Review internal systems</li> </ul>
	<ul style="list-style-type: none"> <li>A competitive, low-carbon, climate-resilient and environmentally sustainable economy</li> </ul>	<ul style="list-style-type: none"> <li>Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050</li> </ul>	<ul style="list-style-type: none"> <li>Confirmation of progress in implementing of Wicklow County Council's Climate Change Adaptation Strategy 2019-2024 and Climate Action Plan 2024-2029</li> </ul>	<ul style="list-style-type: none"> <li>Where targets are not achieved, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.</li> </ul>
	<ul style="list-style-type: none"> <li>Share of renewable energy in transport</li> </ul>	<ul style="list-style-type: none"> <li>Contribute towards the National Energy and Climate Plan 2021-2030 sectoral target for transport (RES-T) of 14%, by 2030 (this</li> </ul>	<ul style="list-style-type: none"> <li>EPA Greenhouse Gas Emissions</li> </ul>	

SEA Environmental Report Appendix II: Non-Technical Summary

Environmental Component	Indicators	Targets	Sources	Remedial Action <sup>53</sup>
	<ul style="list-style-type: none"> <li>Greenhouse gas emissions</li> </ul>	<p>may be increased following a provisional European agreement on 30 March 2023 for a binding overall RES target of at least 42.5% by 2030)</p> <ul style="list-style-type: none"> <li>Contribute towards the target of aggregate reduction in carbon dioxide (CO<sub>2</sub>) emissions of at least 51% (compared to 1990 levels) by 2030 (helping to set Ireland on a path to reach net-zero emissions by 2050)</li> </ul>	<p>reporting</p> <ul style="list-style-type: none"> <li>Internal review of implementation of Plan provisions relating to renewable energy in transport, including facilitating the development of electricity charging and transmission infrastructure</li> </ul>	
	<ul style="list-style-type: none"> <li>Energy consumption, the uptake of renewable options and solid fuels for residential heating</li> </ul>	<ul style="list-style-type: none"> <li>To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating</li> </ul>		
	<ul style="list-style-type: none"> <li>Proportion of journeys made by private fossil fuel-based car compared to previous levels</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in the proportion of journeys made by residents of the City using private fossil fuel-based car compared to previous levels</li> <li>Progress in successfully implementing Plan measures relating to sustainable mobility and travel</li> </ul>	<ul style="list-style-type: none"> <li>CSO data</li> <li>Internal review of progress on implementing Plan objectives</li> </ul>	<ul style="list-style-type: none"> <li>Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.</li> </ul>
	<ul style="list-style-type: none"> <li>Proportion of people reporting regular cycling / walking to school and work above previous CSO figures</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures</li> <li>Progress in successfully implementing Plan measures relating to active travel</li> </ul>	<ul style="list-style-type: none"> <li>CSO data</li> <li>Internal review of progress on implementing Plan objectives</li> </ul>	<ul style="list-style-type: none"> <li>Where proportion of population shows increase in private car use above previous CSO figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.</li> </ul>
<b>Cultural Heritage</b>	<ul style="list-style-type: none"> <li>Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Where monitoring reveals visitor or development pressure is causing negative effects on designated archaeological or architectural heritage, the Council will work with Regional Assembly, Fáilte Ireland and the National Monuments Service and other stakeholders, as relevant, to address pressures through additional mitigation.</li> </ul>
	<ul style="list-style-type: none"> <li>Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	
<b>Landscape</b>	<ul style="list-style-type: none"> <li>Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan</li> </ul>	<ul style="list-style-type: none"> <li>Internal review of development management / grants of permission</li> </ul>	<ul style="list-style-type: none"> <li>Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re-examine Plan provisions and the effectiveness of their implementation</li> </ul>