SEA ENVIRONMENTAL REPORT

APPENDIX II — Non-Technical Summary

FOR THE

DRAFT PORTLAOISE LOCAL AREA PLAN 2024-2030

for: Laois County Council



by: CAAS Ltd.



JANUARY 2024

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Section 1 Introduction and Terms of Reference

This is the Non-Technical Summary of the Environmental Report for the Portlaoise Draft Local Area Plan (LAP) 2024-2030. 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 town.

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

The Plan directs incompatible development away from the most sensitive areas in the town 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 town will contribute towards environmental protection and sustainable development, including climate mitigation and adaptation.

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

Compatible sustainable development in the town'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.

Section 2 The Draft Plan

2.1 Introduction and Content

The Draft Portlaoise Local Area Plan (LAP) 2024-2030 has been prepared in accordance with the requirements and provisions of the Planning and Development Act 2000, as amended (hereafter referred to as 'the Act').

The Draft Plan sets out an overall strategy for the proper planning and sustainable development of Portlaoise, in the context of the Laois County Development Plan 2021-2027 and the Eastern and Midland Regional Spatial and Economic Strategy 2019-2031. The Draft Plan has also been informed by Ministerial Guidelines issued pursuant to Section 28 of the Act.

2.2 Form and Content of the Plan

The Draft Plan comprises a written statement and accompanying maps. The written statement shall take precedence over the map should any discrepancy arise. In the full interpretation of all objectives for Portlaoise, it is essential that both the County Development Plan and the Draft Local Area Plan are read together. Where conflicting objectives arise between the two, the objectives of the former shall take precedence.

The general development management standards applicable to the Plan area are included in the County Development Plan, while policies and objectives that are specific to Portlaoise are included in the Draft LAP.

It is a specific provision of the Plan to ensure that all of the provisions from the Laois County Development Plan 2021-2027 identified in this SEA Environmental Report and accompanying Appropriate Assessment (AA) Natura Impact Report that accompany this Plan shall be complied with throughout the implementation of this Plan.

2.3 Strategic Vision and associated Policies and Objectives

The Draft Local Area Plan for Portlaoise is underpinned by the following Strategic Vision, which is intended to guide the future growth of the town over the period 2024-2030: "To fulfil the role as Key Town, by providing for low carbon, sustainable and consolidated growth in a coherent spatial manner, protecting and maximising opportunities presented by the unique natural and built environment for green and public modes of transport, recreation and employment opportunities, while delivering an exemplar quality of life for residents".

On the basis of the above, it is the Policy of the Council to:

- 1. Support the continued growth and sustainable development of Portlaoise to act as a growth driver in the region and to fulfil its role as a Key Town as outlined in the Regional Spatial and Economic Strategy 2019.
- 2. Direct population into the Key Town to ensure that population growth is appropriate in scale with its identified role in the Regional and County Settlement Hierarchy.
- 3. Require sustainable, compact, sequential growth in Portlaoise by consolidating the built-up footprint with a focus on the redevelopment and regeneration of infill and brownfield sites.
- 4. Apply increased residential densities where appropriate having regard to Sustainable Residential Developments in Urban Areas (2009) and apply appropriate development management measures in ensuring growth is appropriate and in compliance with the RSES 2019.
- 5. Implement the actions of the 'Portlaoise Public Realm Strategy "2040 And Beyond: A Vision for Portlaoise' to improve the character of the town of Portlaoise.
- 6. Support and facilitate the transition of Portlaoise to a low carbon centre of excellence in accordance with RPO 4.72 of the RSES.

- 7. To protect, conserve and enhance the built, natural and cultural environment, through promoting awareness, utilising relevant heritage legislation and promoting good quality urban design.
- 8. To require the preparation and assessment of all planning applications in the plan area to have regard to the information, data and requirements of the Appropriate Assessment Natura Impact Report and SEA Environmental Report.
- 9. To require projects to be fully informed by ecological and environmental constraints at the earliest stage of project planning and any necessary assessment to be undertaken, including assessments of disturbance to habitats and species, where required.

The following are specific Objectives in relation to the delivery of the above Policies and Strategic Vision:

- 1. To support and facilitate sustainable intensification and consolidation of the town centre and in established residential areas.
- 2. To promote balanced economic development and employment ensuring a diverse range of economic sectors are developed and supported.
- 3. To promote and support the development of an enterprise and employment campus at National Enterprise Park, Togher Area. Development shall be plan led and subject to a masterplan.
- 4. To support and facilitate development on zoned land based on the policies and objectives of the Laois County Development Plan 2021-2027.
- 5. To focus new residential development into brownfield sites.
- 6. To protect, conserve and enhance the built, natural and cultural environment, through promoting awareness, utilising relevant heritage legislation and promoting good quality urban design.
- 7. To require the preparation and assessment of all planning applications in the plan area to have regard to the information, data and requirements of the Appropriate Assessment Natura Impact Report and SEA Environmental Report.
- 8. To require projects to be fully informed by ecological and environmental constraints at the earliest stage of project planning and any necessary assessment to be undertaken, including assessments of disturbance to habitats and species, where required.

2.4 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of the placing of the Draft Plan on public display, Laois County Council undertook various works in order to inform the preparation of the Plan.

Strategic work undertaken by the Council includes background work in relation to Plan provisions, including those relating to:

- Core Strategy;
- Climate change;
- Town centre revitalisation;
- Placemaking;
- Housing;
- Economic development;
- Transport and movement;
- Community services development;
- Built heritage; and
- Biodiversity and natural heritage.

The undertaking of the SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions.

2.5 Relationship with other relevant Plans and Programmes

It is acknowledged that many of the major issues affecting Portlaoise's development are contingent on national policy and government funding.

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 include plans and programmes such as those referred to throughout this summary. These documents have been subject to their own environmental assessment processes, as relevant.

The National Planning Framework 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 Laois 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.

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 town.

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:

- **Ridge of Portlaoise proposed Natural Heritage Area** located partially within the Plan area and extending to the north and south of the town along the Triogue River, with some sensitive habitats and species including esker ridge, ash and hazel woodland, species-rich grassland and disused gravel pits;
- Other designated sites surrounding the Plan area: Clonreher Bog Natural Heritage Area located c. 1.5 km to the north-west of the Plan area; The Great Heath of Portlaoise proposed Natural Heritage Area located c. 3 km to the north-east of the Plan area; Dunamase Woods proposed Natural Heritage Area located c. 2 km to the east of the Plan area; Rock of Dunamase proposed Natural Heritage Area located c. 3 km to the east of the Plan area; and Kilteale Hill proposed Natural Heritage Area located c. 4 km to the east of the Plan area;
- Locally important habitats within the Plan area, 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
- Aquatic and riverine ecology associated with the rivers and streams, including the River Triogue and Kylegrove Stream, including their tributaries and riparian buffer zones.

Designated sites in the wider area include Special Areas of Conservation¹ (SACs) and Special Protection Areas² (SPAs). These are mapped on Figure 3.1. There are a total of seven European sites (five SACs and two SPAs) designated within 15 km of the Plan boundary.

The CORINE 2018³ mapping (as shown on Figure 3.2) identifies the land cover of central parts of the Plan area as urban fabric containing areas of industrial or commercial units and surrounding lands identified as pastures and non-irrigated arable land. Mixed forests and peat bogs are identified to the north-west and south-west of the Plan area.

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

² SPAs have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - due to their conservation value for birds of importance in the EU.

³ 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.

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 6th 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 Portlaoise recorded a population of 23,494 persons, which represents an increase from 22,050 persons recorded in the previous Census by 6.5%. The Core Strategy in Laois County Development Plan 2021-2027 sets out a significant population growth level in Portlaoise and has allocated a population increase of 4,316 persons over the Plan period.

Portlaoise is identified as a Key Town within the Laois County Development Plan 2021-2027. Key Towns are large economically active service towns that provide employment opportunities for surrounding areas, high quality transport links and can complement the Regional Growth Centres.

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;
- 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 areas⁴ of Portlaoise are: groundwater gleys (wetland soils with slowly permeable horizons resulting in seasonal waterlogging) located to the north, east and south of the Plan area; luvisol soils (generally fertile, widely used for agriculture and associated with significant

⁴ 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.

accumulation of clay) located to the north-west, west and south-west of the Plan area; and alluvial soils (associated with alluvial clay, silt or sand river deposits of the River Triogue).

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 Laois was completed in 2014, which identified 33 CGSs in County Laois. There is one designated County Geological Site occurring within the Plan area, namely Ridge of Portlaoise CGS (Site Code: LS029). Other County Geological Sites occurring adjacent or surrounding the Plan area include Rathleague Spring CGS (Site Code: LS028) located south-east of the Plan area; and Darkin Well CGS (Site Code: LS010) located northeast of the Plan area.

The GSI have identified⁵ the Plan area as having mainly low levels of landslide susceptibility.

3.6 Water

Surface water at and around the Plan area is channelled by rivers, streams and their tributaries, including the River Triogue flowing from south to the north through the centre of the town and Kylegrove Stream, flowing from south to north to the west of the town, before joining the River Triogue to the north of the Plan area.

The current WFD (2016-2021) status⁶ of different stretches of the surface waters draining the Plan area is *poor* (identified by the EPA as 'Triogue_010'; 'Triogue_020'; 'Triogue_030'; and 'Kylegrove Stream_010'). Subject to exemptions provided for by Article 4 of the WFD, these water bodies will need improvement in order to comply with the objectives of the WFD. 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 (also illustrated on Figure 3.3) is currently identified as being of *good status*, meeting the objectives of the WFD.

Land use zoning provisions, flood risk management and drainage provisions are already in force through the County Development Plan. A Strategic Flood Risk Assessment (SFRA) has been undertaken as part of the preparation of the County Development 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 informed both the land use zoning and the written provisions of the County Development Plan. Furthermore, additional written provisions relating to flood risk management and drainage have been integrated into the LAP.

Historical flooding is documented by the Office of Public Works. A recurring flood event, for example, is identified to the south of Lough Rea.

The most significant source of flood risk within the Plan area is from fluvial (from rivers and streams), however there are other sources of flooding present including pluvial (from rainwater) and risk from surface drainage systems.

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⁵ https://www.gsi.ie/en-ie/programmes-and-projects/geohazards/projects/Pages/Landslide-Susceptibility-Mapping.aspx

⁶ As per EPA's WFD Status 2016-2021 classification (https://gis.epa.ie/EPAMaps/).

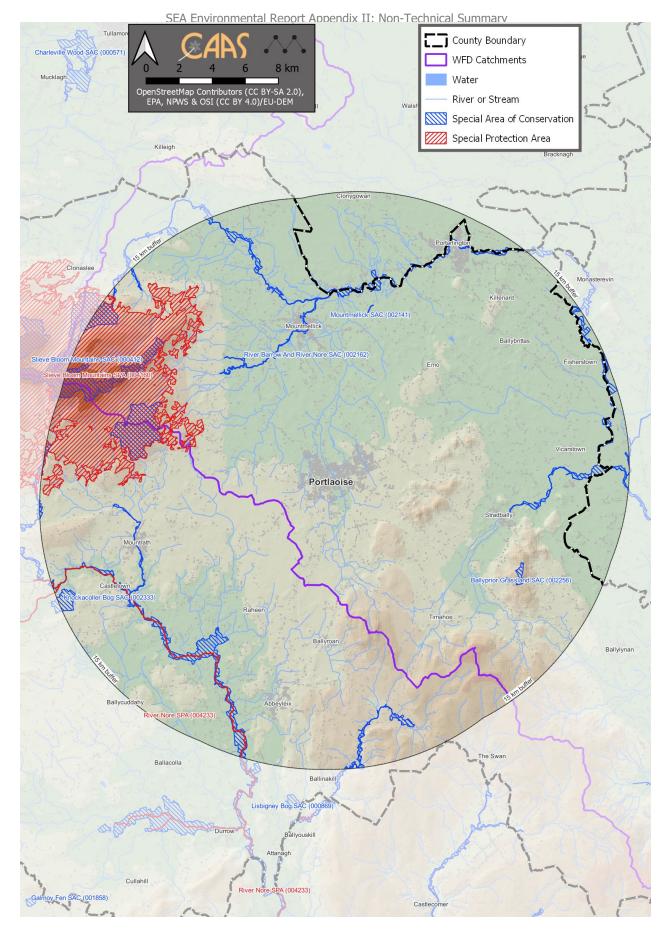


Figure 3.1 European Sites within and within 15 km buffer of the Plan area

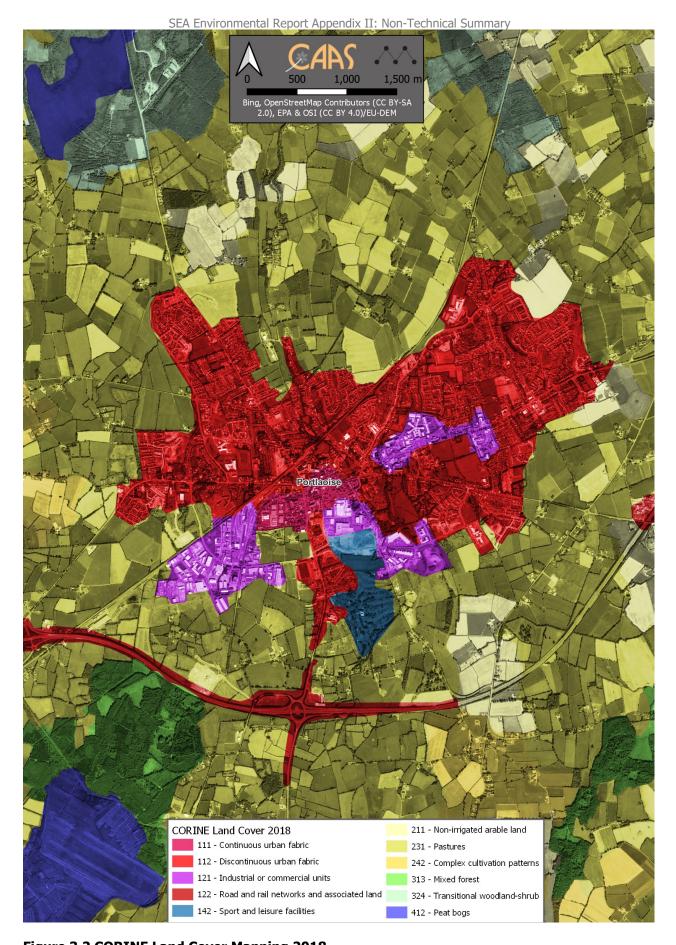


Figure 3.2 CORINE Land Cover Mapping 2018

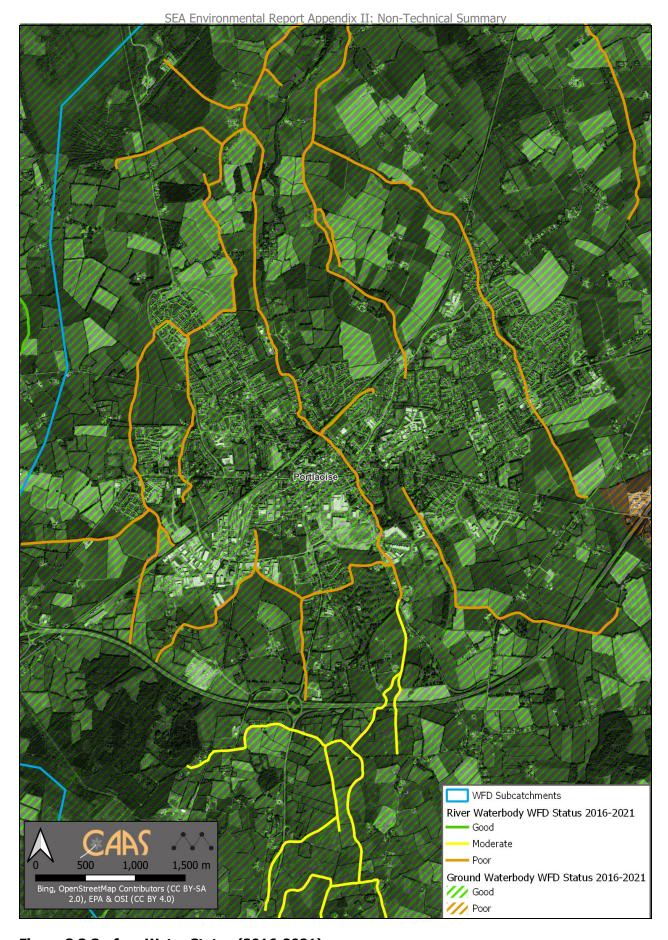


Figure 3.3 Surface Water Status (2016-2021)

3.7 Air and Climatic Factors

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 2023 (the second annual update to Ireland's Climate Action 2019) provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021. The Plan lists the actions needed to deliver on climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated periodically, to ensure alignment with legally binding economy-wide carbon budgets and sectoral ceilings.

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 Department of Communications, Climate Action and Environment, 2018), sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The National Adaptation Framework outlines a whole of government and society approach to climate adaptation. Under the Framework, a number of Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for.

The Laois County Council Climate Change Adaptation Strategy 2019-2024 features a range of actions across sectors including: agriculture, forestry, biodiversity, built and archaeological heritage, transport infrastructure, electricity and gas networks, communication networks, flood risk management, water quality, water services infrastructure and health. The Strategy seeks to:

- Ensure a proper comprehension of the key risks and vulnerabilities of climate change;
- Bring forward the implementation of climate resilient actions in a planned and proactive manner; and
- Ensure that climate adaptation considerations are mainstreamed into all plans and policies and integrated into all operations and functions of Laois County Council.

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

- Air quality in Ireland is generally good, however, there are concerning localised issues.
- Ireland met all of its EU legal requirements in 2022 but it did not meet the more stringent health-based World Health Organisation (WHO) Air Quality guidelines.
- Fine particulate matter (PM_{2.5}) from solid fuel combustion and nitrogen dioxide (NO₂) from vehicle emissions are the main pollutants.
- It is estimated that there are approximately 1,300 premature deaths annually in Ireland due to poor air quality from PM_{2.5}.
- The choices people make in how they heat their homes and how they travel directly impact the quality of the air they breathe.
- Ireland's ambition in the Clean Air Strategy is to move towards the WHO Air Quality guidelines.

The report further identifies the critical role of local authorities in the enforcement and implementation of existing plans and 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 NO₂ emissions.

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: resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, telecommunications, water supply, waste water infrastructure etc.); and natural resources that are covered under other topics such as water and soil.

Waste Water

The Wastewater Treatment Plant (WWTP) serving Portlaoise is currently not listed as a priority area⁷ (such areas are those where improvements are required to resolve urgent environmental issues).

The Portlaoise WWTP has a design capacity of 39,000 Population Equivalent (PE), with current load of 30,536 PE.⁸ As indicated by Uisce Eireann, there is spare capacity available.⁹

The Portlaoise WWTP (Registration No. D0001-01) is currently fully compliant with the Emission Limit Values (ELVs) set in the Wastewater Discharge Licence in the most recent available Annual Environmental Report 2022 (published in March 2023).¹⁰

Uisce Éireann is currently progressing a project to upgrade the Borris Road pumping station and gravity sewers in the network leading up to it. This upgrade will deliver an additional 1,400 PE capacity and will serve the areas to the East of the Pumping Station and the Kilminchy area.¹¹

Water Supply

Uisce Éireann is responsible for providing and maintaining adequate public water supply infrastructure throughout County Laois.

Portlaoise is located within the Portlaoise Water Resource Zone¹² 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.¹³

The Water Supply Schemes (WSS) for the Plan area include the Portlaoise WSS. This Scheme produces approximately 7,500 m³/day and serves 22,544 consumers. There are currently 8 boreholes sources at Eyne, Straboe, Cool Banagher, Derrygarran and Ballydavis and the water is treated at Kilminchy Water Treatment Plant.¹⁴

Under Section 58 of the Environmental Protection Agency Act 1992, the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports that are supported by Remedial Action Lists (RALs). The RAL identifies water supplies that are not in compliance with the Regulations mentioned above. The most recent EPA Remedial Action List (Q2 of 2023, published in September 2023)¹⁵ does not include any water scheme that supplies the Plan area.

Waste Management

Waste management within the Plan area is guided by the Eastern-Midlands Waste Management Plan 2015-2021 that provides frameworks for the prevention and management of waste in a sustainable manner.

There are three Region Waste Management Plans in Ireland and these will be replaced by a new National Waste Management Plan for a Circular Economy, which will take account of the various measures outlined in A Waste Action Plan for A Circular Economy - Ireland's National Waste Policy 2020-2025.

⁷ https://www.epa.ie/publications/monitoring--assessment/waste-water/Urban-Waste-Water-Treatment-in-2022-Report.pdf

⁸ https://www.water.ie/docs/aers/2022/D0001-01_2022_AER.pdf

⁹ Uisce Éireann: Settlements with Waste Water Discharge Authorisations - *Wastewater Treatment Capacity Register*. The register provides an indication of available wastewater treatment capacity based on loads received in 2021 and available treatment plan capacity now or by completion of a project by 2024 (where relevant). Available at: https://www.water.ie/connections/developer-services/capacity-registers/wastewater-treatment-capacity-register/laois/ (Published in June 2023).

¹⁰ https://www.water.ie/docs/aers/2022/D0001-01_2022_AER.pdf

¹¹ Draft Portlaoise Local Area Plan 2024-2030

¹² 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.

¹³This 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. Source:https://www.water.ie/connections/developer-services/capacity-registers/water-supply-capacity-register/laois/_(Published in June 2023).

¹⁴ https://www.epa.ie/publications/compliance--enforcement/drinking-water/audit-reports/laois/Portloaise.pdf

¹⁵ Available at: https://www.epa.ie/publications/compliance--enforcement/drinking-water/annual-drinking-water-reports/Q2-2023-RAL-for-Public-Drinking-Water-Supplies-FINAL.pdf

Transport

Portlaoise is located on several well served transport links, including Irish Rail routes of Dublin-Cork, Dublin-Limerick and Dublin-Portlaoise train lines. National roads N80 and N77, which transverse the Plan area provide transport routes to Carlow, Abbeyleix and Tullamore. The M7 also bypasses the Plan area, which provides links to Dublin and Limerick and the rest of the Country. Other local roads provide routes to Portarlington, Birr and Roscrea. In addition, bus services are provided by Local Link (with services to Roscrea, Birr, Thurles, Mountmellick, Stradbally and Rosenallis), Bus Éireann (with routes to Waterford, Kilkenny, Carlow, Athlone and Mountmellick) and private bus companies. National, regional and local roads provide vital links between the town and retail, service and employment centres throughout the County and to adjoining counties.

A Local Transport Plan (LTP) 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 provisions of infrastructure and supporting services for development, particularly water and wastewater services, is critical. Current challenges include those identified above.

3.9 Cultural Heritage

Archaeological Heritage

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

Portlaoise town dates to the sixteenth century and is the oldest town in County Laois. Its origins were as an early garrison town and are linked to the Laois/Offaly plantation. There are various Zones of Notification designated within Portlaoise, with entries to the Sites and Monuments Record (SMR) and Record of Monuments and Places (RMP), such as The Fort Protector (a significant historical site of county importance). The town is also designated as a Zone of Notification. The town centre's foundations are centred on the remnants of the Fort Protector on Church Street, which dates back to the mid-sixteenth century.¹⁶

Clusters of monuments are located within the centre of the Plan area and across the town's hinterland. Entries to the RMP include: the town; earthwork sites; tower house; hoard; church site; holy wells; enclosures; and ringforts.

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.

Clusters of architectural heritage are indicated within the town's centre. Notable Protected Structures include: the Courthouse; St. Fintan's Hospital; Church of Ireland; the Fort of Maryborough; and Portlaoise Prison. ¹⁷

An Architectural Conservation Area (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 is currently one ACA designated within the Plan area, Portlaoise ACA, which seeks to protect the special character of the historic core.

¹⁶ Draft Portlaoise Local Area Plan 2024-2030

¹⁷ Laois County Development Plan 2021-2027 CAAS for Laois County Council

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

Portlaoise is located on a relatively flat land with natural features such as the Triogue River, an esker along the Ridge Road and man-made features such as a railway embankment and the busy JFL Avenue influencing the character of the town. The historic core of Portlaoise is centred around the Main Street; the town slopes downwards from west to east towards the River Triogue. The land surrounding the Plan area is predominantly made up of agricultural hinterland, woodlands and peatlands.

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 Laois County Development Plan 2021-2027 identifies six Landscape Character Types/Areas and Scenic Views and Prospects within the Council's administrative area. The landscape sensitivity of County Laois is classified as 'low', 'medium' and 'high'. The Plan area is partially located within the 'Development Boundary' and 'Lowland Agricultural Areas' with 'low' landscape sensitivity. There are no designated Views or Prospects within the Plan area.

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

	able 3.1 Strategic Environmental Objectives						
Environmental	SEO	Strategic Environmental Objectives					
Component	Code						
Biodiversity,	BFF	 To preserve, protect, maintain and, where appropriate, enhance the terrestrial, aquatic and soil biodiversity, 					
Flora and		particularly EU designated sites and protected species					
Fauna		• Ensure no adverse effects on the integrity of any European site, with regard to its qualifying interests, associated					
		conservation status, structure and function					
		 Safeguard national, regional and local designated sites and supporting features which function as stepping stones for 					
		migration, dispersal and genetic exchange of wild species					
		Enhance biodiversity in line with the National Biodiversity Strategy and its targets To provide the project of the Policy Strategy and its targets To provide the project of the Policy Strategy and its targets To provide the Policy Strategy and Its targets To pr					
	B	To protect, maintain and conserve natural capital					
Population	PHH	Promote economic growth to encourage retention of working age population and funding of sustainable development					
and Human		and environmental protection and management					
Health		Ensure that existing population and planned growth is matched with the required public infrastructure and the					
		required services					
Call (and	•	Safeguard citizens from environment-related pressures and risks to health and well-being District as its position and pressure the production of the positive production.					
Soil (and S • Protect soils against pollution, and prevent degradation of the							
Land)		Promote the sustainable use of infill and brownfield sites over the use of greenfield Cofegurard pages of prime paging three land and designated goodspield sites.					
		Safeguard areas of prime agricultural land and designated geological sites					
Water	w	• Ensure that the status of water bodies is protected, maintained and improved in line with the requirements of the					
		Water Framework Directive					
		• 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					
		Avoid inappropriate zoning and development in areas at risk of flooding and areas that are vulnerable to current and					
		future erosion					
		• Integrate sustainable water management solutions (such as SuDS, porous surfacing and green roofs) into					
		development proposals					
Material	MA	Optimise existing infrastructure and provide new infrastructure to match population distribution proposals - this					
Assets		includes transport infrastructure					
		• 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					
		Promote the circular economy, reduce waste, and increase energy efficiencies Figure these is adequate sources and designed infrastructure in place to support now development.					
		 Ensure there is adequate sewerage and drainage infrastructure in place to support new development Reduce the energy demand from the transport sector and support moves to electrification of road and rail transport 					
		modes					
		 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.					
Air	A	To avoid, prevent or reduce harmful effects on human health and the environment as a whole resulting from					
All		emissions to air from all sectors with particular reference to emissions from transport, residential heating, industry					
		and agriculture					
		Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of					
		renewable energy and energy efficiency					
		Promote continuing improvement in air quality					
		Reduction of emissions of sulphur dioxide, nitrogen oxides, volatile organic compounds, ammonia and fine particulate					
		matter which are responsible for acidification, eutrophication and ground-level ozone pollution					
		Meet Air Quality Directive standards for the protection of human health — Air Quality Directive					
		Significantly decrease noise pollution and move closer to WHO recommended levels					
Climatic	С	To minimise emissions of greenhouse gasses					
Factors		Integrate sustainable design solutions into infrastructure (e.g. energy efficient buildings; green infrastructure)					
		Contribute towards the reduction of greenhouse gas emissions in line with national targets					
		Promote development resilient to the effects of climate change					
		Promote the use of renewable energy, energy efficient development and increased use of public transport					
Cultural	СН	Protect places, features, buildings and landscapes of cultural, archaeological or architectural heritage					
Heritage		. , ,					
Landscape	L	To implement the Plan's framework for identification, assessment, protection, management and planning of landscapes					
p		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.

4.2 Limitations in Available Alternatives

The Plan is required to be prepared by the existing, already in force, Laois County Development Plan 2021-2027 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, including those of the National Planning Framework (NPF), the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midlands Region and the County Plan. These documents set out various requirements for the content of the Plan including on topics such as land use zoning.

4.3 Alternatives Already Considered

The preparation of the Laois County Development Plan and associated SEA process already considered various different types of alternatives, including those relating to population allocations, land use zoning and densities. The selected alternatives for the County Development Plan sets requirements for lower tier planning in the County and have been integrated into the Local Area Plan, as appropriate.

4.4 Local Transport Plan Alternatives

- **Local Transport Plan Alternative 1**: Inform the Plan with a Local Transport Plan, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes.
- Local Transport Plan Alternative 2: Do not inform the Plan with a Local Transport Plan, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, relying solely on existing provisions, including those included as part of the County Development Plan.

Informing the Plan with a Local Transport Plan, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative 1**) would provide a more coordinated and more orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, more likely. This approach would be more likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts on environmental components including ecology and water would need to be adequately mitigated at project level.

Not informing the Plan with a Local Transport Plan, which focuses on delivering travel solutions that support moving people from the private car to more sustainable modes, (**Area Based Transport Assessment Alternative 2**) would provide a less coordinated and less orderly provision of transport infrastructure and services, with delivery of projects, and associated benefit with respect to sustainable mobility and compact development, less likely. This approach would be less likely to improve the potential for meeting important objectives relating to emissions and energy use. Potentially adverse impacts arising

from more coherently planned transport developments on environmental components, including ecology and water, could be mitigated at both LAP and project level.

Selected Local Transport Plan Alternative for the Plan: Alternative 1

4.5 Transport Infrastructure Alternatives

In integrating provisions relating to the provision of transport infrastructure into the Plan, the following alternatives were considered:

- **Transport Infrastructure Alternative 1:** Provide new transport infrastructure with all additional environmental mitigation left to be defined until project level.
- **Transport Infrastructure Alternative 2:** Provide new transport infrastructure, subject to environmental constraints, including those related to habitats and potential impacts such as disturbance from lighting includes minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques.

Under **Transport Infrastructure Alternative 1**, new transport infrastructure would be considered subject to environmental constraints, including those related to habitats and potential impacts (e.g. disturbance from lighting). This would include minimising river crossings, avoiding sensitive habitats, not increasing barriers to flood waters and sustainable design and construction techniques. By focusing on mitigation at both plan and project levels, Alternative 1 would offer the most certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions/energy objectives) receiving permission.

Under **Transport Infrastructure Alternative 2**, all additional environmental mitigation would be left to be defined in the future, at project level. This would offer the least certainty for environmental protection and management and would be more likely to result in important individual projects (relating to sustainable mobility and emissions objectives) not been given permission.

Selected Transport Infrastructure Alternative for the Plan: Alternative 1

4.6 Ecosystem Services Approach Alternatives

The importance of fulfilling natural capital¹⁸ and ecosystem¹⁹ service obligations has increasingly emerged in recent years. An Ecosystems Services Approach would provide a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. An Ecosystems Services Approach would include the integration of ecological considerations at a local level across the Plan area.

- **Ecosystem Services Approach Alternative 1**: A Plan that follows an Ecosystems Services Approach to a greater degree.
- **Ecosystem Services Approach Alternative 2**: A Plan that that does not follow, or follows to a lesser degree, an Ecosystems Services Approach.

Ecosystem Services Approach Alternative 1 would integrate a strategy throughout the Plan for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. Principles that would be integrated throughout the Plan, in a coordinated and comprehensive manner, would include:

 Consideration of natural systems - by using knowledge of interactions in nature and how ecosystems function;

-

¹⁸ Renewable and non-renewable resources (e.g. plants, animals, air, water, soils, minerals).

¹⁹ Ecosystems are multifunctional communities of living organisms interacting with each other and their environment. Ecosystems provide a series of services for human well-being (ecosystem services) either directly or indirectly contributing towards human wellbeing.

- Taking into account of the services that ecosystems provide including those that underpin social
 and economic well-being, such as flood and climate regulation or recreation, culture and quality
 of life; and
- Involving people those who benefit from the ecosystem services and those managing them need to be involved in decisions that affect them.

This would mean that there would be:

- An increased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues, such as the management of air quality, noise pollution, light pollution, pollination, flood risk, water bodies and river basins and natural resources supporting energy production and recreation; and
- A decreased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services.

Ecosystem Services Approach Alternative 2 would not integrate a strategy throughout the Plan for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.

As has been the case over previous plan periods, many natural capital and ecosystem service issues would be integrated into individual Plan Policy Objectives and into decision making at lower tiers of plan preparation and development management. However, this approach would be less coordinated and comprehensive than would be the case under an Ecosystems Services Approach.

This would mean that there would be:

- A decreased likelihood in the extent, magnitude and frequency of positive effects occurring with regard to natural capital and ecosystem service issues; and
- An increased likelihood in the extent, magnitude and frequency of adverse effects on natural capital and ecosystem services.

Selected Ecosystem Services Approach Alternative for the Plan: Alternative 1

4.7 Built Heritage Alternatives

- **Built Heritage Alternative 1**: A Plan that adds detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage.
- **Built Heritage Alternative 2**: A Plan that does not add detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage, relying solely on existing provisions, including those included as part of the County Development Plan.

A Plan that adds detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage (**Built Heritage Alternative 1**) would further contribute the protection of existing heritage that is already contributed towards by the existing planning framework. By integrating heritage considerations into the Plan, Alternative 1 would be most likely to ensure that new development respects the historic grain of the built environment and archaeology that currently exists.

A Plan that does not add detailed, local-level provisions to the existing planning framework relating to the conservation of built heritage, relying solely on existing provisions, including those included as part of the County Development Plan (**Built Heritage Alternative 2**) would not further contribute the protection of existing heritage that is already contributed towards by the existing planning framework. By not integrating heritage considerations into the Plan, Alternative 2 would be least likely to ensure that new development respects the historic grain of the built environment and archaeology that currently exists.

Selected Built Heritage Alternative for the Plan: Alternative 1

4.8 Approach to Opportunity Sites Alternatives

Land use zoning objectives, which provide for a wide range of potential uses, for the Plan area are set out in the Laois County Development Plan. Alternatives under this heading relate to Opportunity Sites across the Plan area.

- **Approach to Opportunity Sites Alternative 1**: Do not include specific guidance for future planning applications at Opportunity Sites; development would be market-led and would seek to comply with relevant planning provisions in the absence of additional guidance.
- Approach to Opportunity Sites Alternative 2: Include specific guidance for future planning applications at Opportunity Sites, but which allow for flexibility in areas such as final design, layout and uses.
- **Approach to Opportunity Sites Alternative 3**: Include Opportunity Sites that would outline criteria (which would not allow for flexibility in areas such as design, layout and uses) for future planning applications at Opportunity Sites.

A Local Area Plan for Portlaoise would help to direct incompatible development away from the most sensitive areas in the County and beyond and to focus on directing compact, sustainable development within and adjacent to the existing built-up footprint of Portlaoise. Development of areas within and adjacent to the existing built-up footprint of Portlaoise, which is generally more robust, better serviced and better connected than other lands elsewhere in the County and beyond, would contribute towards environmental protection and sustainable development, including climate mitigation and adaptation. Compact development would be accompanied by placemaking initiatives to enable Portlaoise to become a more desirable place to live — so it can sustainably accommodate new residents and maintain and improve services to existing and future communities.

Not including specific guidance for future planning applications at Opportunity Sites (**Approach to Opportunity Sites Alternative 1**) would reduce the likelihood of sustainable development. Development would be market-led and would seek to comply with relevant planning provisions in the absence of additional guidance. The sustainable development of the Plan area would be less likely than under Alternative 2.

By including specific guidance for Opportunity Sites while, at the same time, allowing for flexibility in areas such as final design, layout and uses, for future planning applications at Opportunity Sites, **Alternative 2** would increase the likelihood of sustainable development.

Including Opportunity Sites that would outline criteria (which would not allow for flexibility in areas such as design, layout and uses) for future planning applications at Opportunity Sites (**Approach to Opportunity Sites Alternative 3**) would increase the potential to hinder compliance with rigid criteria in the longer term, in a context of evolving market needs and planning requirements.

Selected Approach to Opportunity Sites Alternative for the Plan: Alternative 2

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

Alternatives were selected for the LAP having regard to both:

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

Section 5 Summary of Effects arising from Plan

Table 5.1 summarises the overall environmental effects arising from Draft Plan provisions. 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 Laois 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 network²⁰.

Land use zoning provisions, flood risk management and drainage provisions are already in force through the County Development Plan. A Strategic Flood Risk Assessment (SFRA) has been undertaken as part of the preparation of the County Development 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 informed both the land use zoning and the written provisions of the County Development Plan. Furthermore, additional written provisions relating to flood risk management and drainage have been integrated into the LAP.

²⁰ 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	Effects include in-combination effects that are planned for through	tal Effects, in combination with the wider planning framewo the wider planning framework including the NPF and associated NDP, the East 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	
Biodiversity and Flora and Fauna	 Contribution towards protection of ecology (including designated sites, ecological connectivity, habitats) by facilitating development of lands (including those within and adjacent to the town's core areas) 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. Contribution towards the maintenance of existing green infrastructure and associated ecosystem services, listed species, ecological connectivity and non-designated habitats. Contribution towards protection and/or maintenance of biodiversity and flora and fauna by contributing towards the protection of natural capital including the environmental vectors of air, water and soil. Biodiversity and flora and fauna includes biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species (including birds and bats), listed/protected species, ecological connectivity and non-designated habitats (including terrestrial and aquatic habitats), and disturbance to biodiversity and flora and fauna – including terrestrial and aquatic biodiversity and flora and fauna. Sustains existing sustainable rural management practices – and the communities who support them – to ensure the continuation of long-established managed landscapes and the flora and fauna that they contain. 	Arising from both construction and operation of development and associated infrastructure: Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds (e.g. swifts) and bats.	Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. Losses or damage to ecology (these would be in compliance with relevant legislation).	BFF

Environmental	ntal Environmental Effects, in combination with the wider planning framework				
Component		the wider planning framework including the NPF and associated NDP, the Eas		SEO Codes	
	Development F	Plan and adjacent Development Plans and lower-tier land use plans.	,		
	Significant Positive Effect, likely to occur	Potentially Significant Adverse Environmental Effects, if	Likely Residual Adverse Non-		
		unmitigated	Significant Effects		
Population and Human Health	 Promotion of economic growth to encourage retention of working age population and funding of sustainable development and environmental protection and management. Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the town's core areas) 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 Contribution towards the protection of human health by facilitating development of lands (including those within and adjacent to the town's core areas) 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. Contributes towards protection of human health as a result of contributing towards the protection of natural capital including environmental vectors, including air and water. 	 Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	Potential interactions with residual effects on environmental vectors – please refer to residual adverse effects under "Soil", "Water" and "Air and Climatic Factors" below.	РНН	
Soil	Contribution towards the protection of soils (including those used for agriculture) and designated sites of geological heritage by facilitating development of lands (including those within and adjacent to the town's core areas) 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. Contribution towards the protection of the environment from contamination the highest standards of remediation.	 Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank erosion. 	Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces. Riverbank erosion will continue to occur naturally over time and is likely to be enhanced by climate change.	S	

Environmental Component	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 Laois 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	 Contribution towards the protection of water by facilitating development of lands (including those within and adjacent to the town's core areas) 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. Contributions towards the protection of water resources including the status of surface and groundwaters and water-based designations. Contribution towards flood risk management and appropriate drainage. 	 Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	 Any increased loadings as a result of development to comply with the River Basin Management Plan. Flood related risks remain due to uncertainty with regard to extreme weather events – however such risks will be mitigated by measures that have been integrated into the Plan. 	w	
Material Assets	 Contribution towards appropriate provision of infrastructure and services to existing population and planned growth by facilitating compact development of lands (including those within and adjacent to the town's core areas) 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. Contribution towards compliance with national and regional water services and waste management policies. Contribution towards increase in renewable energy use by facilitating renewable energy and electricity transmission infrastructure developments. Contribution towards limits in increases in energy demand from the transport sector by facilitating sustainable compact growth. Contribution towards reductions in average energy consumption per capita including promoting sustainable compact growth, sustainable mobility, sustainable design and energy efficiency. 	 Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the mitigation of potential conflicts). Increases in waste levels. Potential impacts upon public assets and infrastructure. Interactions between agricultural waste and soil, water, biodiversity and human health – including as a result of emissions of ammonia from agricultural activities (e.g. manure handling, storage and spreading) and the production of secondary inorganic particulate matter. 	Exceedance of capacity in critical infrastructure risks remain, including due to uncertainty with regard to climate – however, such risks will be mitigated by: measures, including those requiring the timely provision of critical infrastructure, and compliance with the Water Framework Directive and associated River Basin Management Plan. Residual wastes to be disposed of in line with higher-level waste management policies. Any impacts upon public assets and infrastructure to comply with statutory planning/consent-granting framework.	MA	

Environmental Component	Effects include in-combination effects that are planned for throu	ffects, in combination with the wider planning framework ugh the wider planning framework including the NPF and associated NDP, the nt Plan and adjacent Development Plans and lower-tier land use plans. Potentially Significant Adverse Environmental Effects, if	Eastern and Midland RSES, the Laois Likely Residual Adverse Non-	SEO Codes
	Significant Positive Effect, likely to occur	unmitigated	Significant Effects	
Air and Climatic Factors	 Contribution towards climate mitigation and adaptation by facilitating compact development of lands (including those within and adjacent to the town's core areas) 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. 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: Sustainable compact growth; Sustainable mobility, including walking, cycling and public transport; Drainage, flood risk management and resilience; Sectors including agriculture, residential heating and infrastructure; Sustainable design, energy efficiency and green infrastructure. 	 Potential conflict between development under the Plan and aiming to reduce carbon emissions in line with local, national and European environmental objectives. Potential conflicts between transport emissions, including those from cars, and air quality²¹. Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors²². Potential conflicts with climate adaptation measures including those relating to flood risk management. 	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. 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.	AC
Cultural Heritage	 Contributes towards protection of cultural heritage elsewhere by facilitating development within the Plan area. Contributes towards protection of cultural heritage within the Plan area by facilitating brownfield development and regeneration. 	 Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	Potential effects on known architectural and archaeological heritage and unknown archaeology however, these will occur in compliance with legislation.	СН
Landscape	Contributes towards protection of wider landscape and landscape designations by facilitating development within the Plan area.	Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape.	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.	L

²¹ Although interventions would be likely to result in an overall reduction in traffic flows and associated interactions with air, noise and human heath, there would be potential for displacement of traffic to lead to localised increases traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the Plan area and beyond.

²² Although interventions would be likely to result in an overall reduction in traffic flows and associated interactions with air, noise and human heath, there would be potential for displacement of traffic to lead to localised increases

traffic flows and associated localised potential impacts in terms of increased population exposure to air pollutants and/or elevated noise levels, both within the Plan area and beyond. 25

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 all 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 contribution towards environmental protection and sustainable development²³;
- Considering alternatives for the Plan²⁴;
- 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.

Strategic work undertaken by the Council includes background work in relation to Plan provisions, including those relating to:

- Core Strategy;
- Climate change;
- Town centre revitalisation;
- Placemaking;
- Housing;
- Economic development;
- Transport and movement;
- Community services development;
- Built heritage; and
- Biodiversity and natural heritage.

The undertaking of the SEA process was part of this strategic work and contributed towards the integration of environmental considerations into individual Local Area Plan provisions.

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²³ Far in advance of the placing of the Draft Plan on public display, Laois County Council undertook various works in order to inform the preparation of the Plan.

²⁴ 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.

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	BFF	Condition of European sites	 Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, Local Biodiversity Action Plans 	 DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years)²⁵ DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 3 years)²⁶ Consultations with the NPWS²⁷ 	 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.
		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	Require all local level land use plans to include ecosystem services and green/blue infrastructure provisions in their land use plans and as a minimum, to have regard to the required targets in relation to the conservation of European sites, other nature conservation sites, ecological networks, and protected species Implement and review, as relevant, Local Biodiversity Action Plans	Internal review of local land use plans	Review internal systems
		 SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	 Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. 	Internal monitoring of preparation of local land use plans	Review internal systems
		Status of water quality in water bodies	Included under Water below	Included under Water below	Included under Water below
		Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see County Development Plan Chapter 11 "Biodiversity and Natural Heritage"	• 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 11 "Biodiversity and Natural Heritage"	Internal monitoring of likely significant environmental effects of grants of permission	Review internal systems

²⁵ 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.

²⁶ 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

²⁷ 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.

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action
Population and Human Health	РНН	Implementation of Plan measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 6 "Economic Development"	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to the promotion of economic growth as provided for by County Development Plan Chapter 6 "Economic Development" All citizens will have access to speeds of 30Mbps, and that 50% of citizens will be subscribing to speeds of 100Mbps (Also relevant to Material Assets) 	Internal review of progress on implementing Plan objectives Consultations with DECC	Review internal systems Consultations with DECC
		Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan	 No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan 	Consultations with the Health Service Executive and EPA	Consultations with the Health Service Executive and EPA
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	 Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	 CSO data Monitoring of Laois County Council's Climate Change Adaptation Strategy 2019-2024 	 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.
		Number of spatial plans that include specific green infrastructure mapping	 Require all local level land use plans to include specific green infrastructure mapping 	Internal review of local land use plans	Review internal systems
Soil (and Land)	S	Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets)	 Maintain built surface cover nationally to below the EU average of 4% as per the NPF 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 To map brownfield and infill land parcels 	 EPA Geoportal Compilation of greenfield and brownfield development for the DHLGH AA/Screening for AA for each application 	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.
		Instances where contaminated material generated from brownfield and infill must be disposed of	 Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	 Internal review of grants of permission where contaminated material must be disposed of 	Consultations with the EPA and Development Management
		Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission	 Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	Internal monitoring of grants of permission	Review internal systems

Environmental	SEO	Indicators	SEA Environmental Report Appendix II: No Targets	Sources	Remedial Action
Component	Code				
Water	w	Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD	 Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the River Basin Management Plan 	EPA Monitoring Programme for WFD compliance ²⁸	 Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Uisce Éireann to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance. Where planning applications are rejected due to insufficient capacity in the WWTP or failure of the WWTP to meet Emission Limit Values, the Council will consider whether it is necessary to coordinate a response with the Regional Assembly, EPA and Uisce Éireann to achieve the necessary capacity.
		Number of incompatible developments permitted within flood risk areas	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	Internal monitoring of likely significant environmental effects of grants of permission	 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.
Material Assets	MA	Programmed delivery of Uisce Éireann infrastructure for all key growth towns in line with Uisce Éireann Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	 All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not – incombination with other septic tanks – contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Uisce Éireann in developing water and wastewater infrastructure See also targets relating to greenfield and brownfield development of land under Soil and broadband under Population and Human Health 	Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Uisce Eireann DHLGH in conjunction with Local Authorities	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.
		Proportion of people reporting regular cycling / walking to school and work above previous CSO figures	Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures	CSO data Monitoring of Laois County Council's Climate Change Adaptation Strategies 2019-2024	 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.

²⁸ Including monitoring of water quality and nitrogen deposition due to bioenergy and agricultural projects where available CAAS for Laois County Council

Environmental Component	SEO Code	Indicators	Targets	Sources	Remedial Action				
Air	A	 Proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	 Decrease in proportion of journeys made by private fossil fuel-based car compared to previous National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and Department of Environment, Climate and Communications	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				
Climatic Factors	С	Implementation of Plan measures relating to climate reduction targets	 For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets 	Internal monitoring of likely significant environmental effects of grants of permission	Review internal systems				
		A competitive, climate-resilient and environmentally economy Share of renewable energy in	Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 Contribute towards the target of the	Monitoring of Laois County Council's Climate Change Adaptation Strategies 2019-2024 EPA Annual National Greenhouse Gas Emissions Inventory	 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. 				
		transport	Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan	reporting Climate Action Regional Office Consultations with DECC (at monitoring evaluation)					
		 Energy consumption, the uptake of renewable options and solid fuels for residential heating 	 To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 						
						Proportion of journeys made by private fossil fuel-based car compared to previous levels	Decrease in the proportion of journeys made by residents of the using private fossil fuel-based car compared to previous levels	CSO data Monitoring of Laois County Council's Climate Change Adaptation Strategies 2019-2024	 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.
		 Proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	 Increase in the proportion of people reporting regular cycling / walking to school and work above previous CSO figures 	CSO data Monitoring of Laois County Council's Climate Change Adaptation Strategies 2019-2024	 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. 				

Environmental	SEO	Indicators	Targets	Sources	Remedial Action
	Code	Tildicators	largets	Sources	Remedial Action
Component Cultural Heritage	СН	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	Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan	Internal monitoring of likely significant environmental effects of grants of permission	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.
		Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan	Consultation with DHLGH.	
Landscape	L	Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan	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	Internal monitoring of likely significant environmental effects of grants of permission	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