

Appendix 19c

SEA Statement



Waterford
City & County Council
Comhairle Cathrach
& Contae Phort Láirge

SEA STATEMENT

FOR THE

WATERFORD CITY AND COUNTY DEVELOPMENT PLAN 2022-2028

for: Waterford City and County Council

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The Mall
Waterford City



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Section 1 Introduction

1.1 Introduction and Legislative Context

This is the Strategic Environmental Assessment (SEA) Statement for the Waterford City and County Development Plan 2022-2028.

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a 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 and social considerations.

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 and the Planning and Development (Strategic Environmental Assessment) Regulations 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011.

1.2 Content of the SEA Statement

Where SEA is undertaken, the Regulations require that a Statement is made available to the public and the competent environmental authorities after the making of the Plan.

This Statement is referred to as an SEA Statement.

The SEA Statement is required to include information summarising:

- a) how environmental considerations have been integrated into the Plan;
- b) how the following have been taken into account during the preparation of the Plan:
 - the environmental report,
 - submissions and observations made to the planning authority on the Draft Plan and Environmental Report, and
 - any transboundary consultations (not required for this SEA).
- c) the reasons for choosing the Plan in the light of the other reasonable alternatives dealt with; and
- d) the measures decided upon to monitor the significant environmental effects of implementing the Plan.

1.3 Implications of SEA for the Plan

SEA has been undertaken on the Plan and the findings of the SEA are expressed in an Environmental Report, the first published version of which accompanied the Draft Plan on public display. The Environmental Report was updated in order to take account of changes to the original Draft Plan that were made on foot of submissions and recommendations in the submissions.

Waterford City and County Council has been provided with the findings of SEA output during their consideration of the Plan and before the Plan was adopted.

Section 2 How Environmental Considerations were integrated into the Plan

2.1 Overview

Environmental considerations were presented to the Council for its consideration through:

1. Consultations;
2. Communication of environmental sensitivities throughout the SEA process;
3. Appropriate Assessment;
4. Strategic Flood Risk Assessment;
5. Consideration of alternatives;
6. Integration of environmental considerations; and
7. Integration of individual SEA and AA provisions into the Plan.

All parts of the Plan-preparation process were informed by the SEA, AA and SFRA processes - this includes the preparation of the Chief Executive's Draft Plan, Members' Amendments to that Plan in advance of public display, Proposed Material Alterations and Further Modifications. The mitigation integrated into the final, adopted Plan includes that identified in Section 9 of this report.

2.2 Instances whereby Environmental Considerations were not integrated into the Plan

The Plan, considered as a whole, contributes towards environmental protection and management and sustainable development and complies with various legislative requirements. This is identified throughout the SEA documentation.

Various Plan provisions that would contribute towards the sustainable development of the County would, at the same time, have the potential to conflict with the environment, were mitigation measures not taken into account. This is normal and mitigation measures have been integrated into the Plan to deal with these potential effects.

However, a number of alterations were adopted by the Elected Members as part of the Plan that are particularly internally inconsistent with the overall approach provided for by the Plan, including those which are identified on Table 2.1 and were advised against by the Plan-preparation/SEA process. Also included on Table 2.1 is advice that was provided by the SEA for consideration in advance of adoption of the Plan.

Table 2.1 Alterations Advised Against but Adopted (including:)

Material Alterations No's.	Commentary provided in advance of Plan Adoption	Mitigation Identified	Recommendation provided in advance of Plan Adoption
205, 211, 225, 284 and 305	<p>Taking into account higher-level planning objectives, these alterations are not justified and it would not provide the most evidence-based framework for development. These alterations would not be consistent with established population targets and/or the proper planning and sustainable development of the County. As a result they would present additional, unnecessary and potentially significant adverse effects on various environmental components, including soil, water, biodiversity, air and climatic factors and material assets.</p> <p>For alterations relating to zoning, much of the zoning proposed is considered to be premature in the context of current population targets.</p> <p>Potentially significant adverse unnecessary effects, would be likely to include:</p> <ul style="list-style-type: none"> • Effects on non-designated habitats and species • Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces • Increased loadings on water bodies • Conflict with efforts to maximise sustainable compact growth and sustainable mobility • Occurrence of adverse visual impacts <p>Where such alterations are further from the centre of settlements, potentially significant unnecessary adverse effects would be likely to include:</p> <ul style="list-style-type: none"> • Difficulty in providing adequate and appropriate waste water treatment as a result of zoning outside of established built development envelopes of settlements (At An Rinn, in particular, the Council have identified major network capacity issues and that pump station and network upgrades are required to deal with current loading) • Adverse impacts upon the economic viability of providing for public assets and infrastructure • Adverse impacts upon carbon emission reduction targets in line with local, national and European environmental objectives • Conflicts between transport emissions, including those from cars, and air quality • Conflicts between increased frequency of noise emissions and protection of sensitive receptors • Potential effects on human health as a result of potential interactions with environmental vectors 	<ul style="list-style-type: none"> • Taking into account higher-level planning objectives, these alterations are not justified and it would not provide the most evidence-based framework for development. • Protect the environment and contribute towards sustainable development. 	Do not adopt as part of Draft Plan

2.3 Consultations

As environmental authorities identified under the Planning and Development (SEA) Regulations, as amended, the following authorities were sent SEA scoping notices indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to Waterford City and County Council¹: Department of Agriculture, Food and the Marine; Department of Culture, Heritage, and the Gaeltacht; Department of Communications, Climate Action and Environment; Department of Housing, Planning and Local Government; Environmental Protection Agency; Cork County Council; Tipperary County Council; Kilkenny County Council; and Wexford County Council.

Detail on submissions made on foot of the SEA scoping notice is provided under Section 3.2.

Detail is also provided on submissions that were made on the Draft Plan and/or the SEA Environmental Report while they were on public display (see Section 3).

2.4 Communication of environmental sensitivities throughout the SEA process

Environmental considerations were integrated into the Plan before it was placed on public display. Individual sensitivities that were considered by the Planning Team preparing the Plan included the following:

- European Sites (Special Areas of Conservation and Special Protection Areas);
- Other Ecological Designations;
- Status of Surface and Ground Waters;
- Various entries to the Water Framework Directive's Register of Protected Areas;
- Groundwater Vulnerability;

¹ The names of some of the authorities have changed since notification was provided as a result of changes in Ministerial responsibilities across Departments.

- Water Services Capacity, Performance and Demand;
- Cultural heritage (archaeological and architectural) sensitivities; and
- Landscape Designations.

A number of these sensitivities are mapped on Figures 2.1 to 2.3.

Overlay mapping of environmental sensitivities was also prepared and a number of the environmental sensitivities described above were weighted and mapped overlapping each other. Figure 2.4 provides the overlay mapping of Environmental Sensitivities that was prepared. Environmental sensitivities are indicated by colours which range from higher to lower sensitivity.

2.5 Appropriate Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA have been undertaken alongside the Plan. The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC).

The conclusion of the AA is that the Plan will not affect the integrity of the European Sites, alone or in combination with other plans or projects.²

The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed the SEA.

2.6 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the Plan. The requirement for SFRA is 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. Recommendations from the SFRA have been integrated into the Plan.

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

2.7 Consideration of Alternatives

Consideration of the environmental effects arising from a variety of different alternatives for the Plan (see Section 4) has contributed towards the protection and management of the environment within the Plan.

informed by, inter alia, various communications through the SEA, AA and SFRA processes. The measures generally benefit multiple environmental components i.e. a measure providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

2.8 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach.

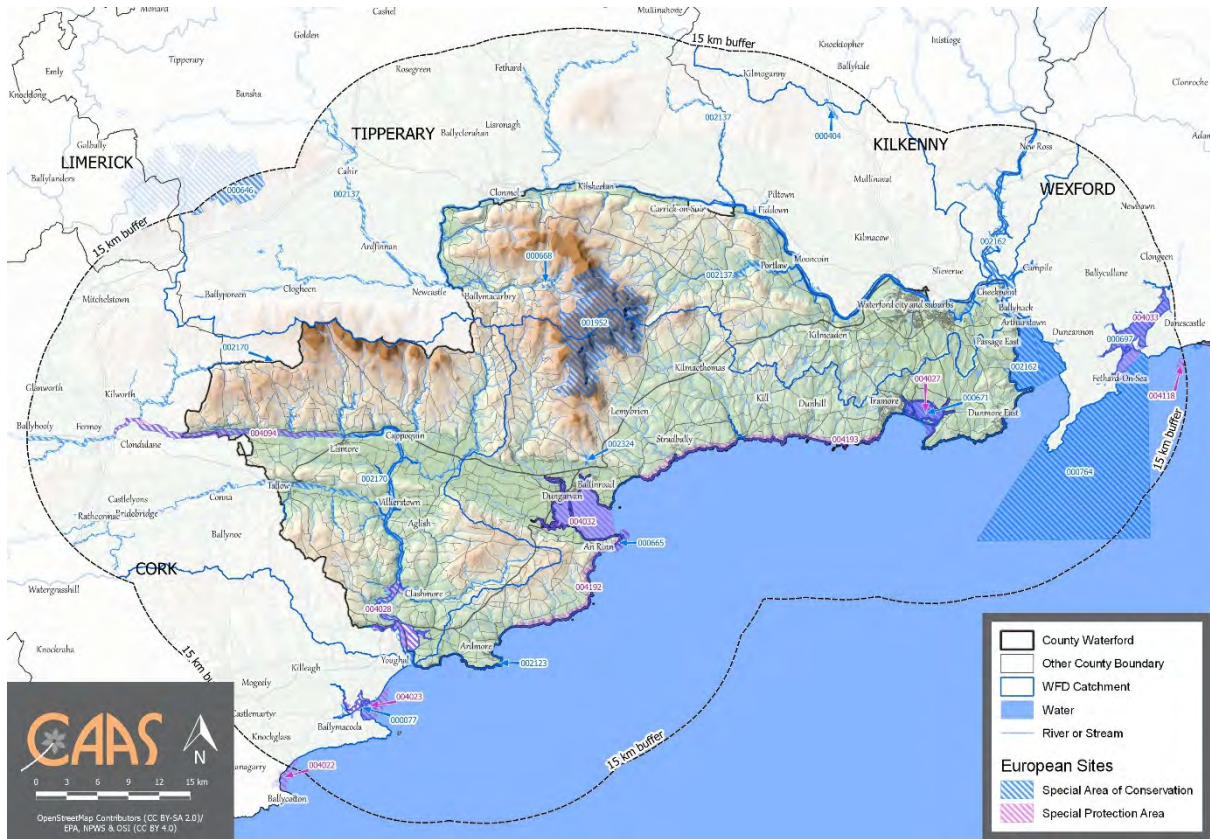
Zoning has been applied in a way that primarily seeks to achieve sustainable and compact growth, taking into account the various requirements set out in the higher-level NPF and Southern RSES.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist seeks to facilitate zoning that will help to avoid inappropriate development being permitted in areas of elevated sensitivity, such as in areas at risk of flooding or ecological sensitivity. Various provisions have been integrated into the Plan that provide for flood risk management and ecological protection and management at project level.

Also taken into account were environmental sensitivities relating to ecology, cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

2.9 Integration of individual SEA, AA and SFRA provisions into the text of the Plan

Table 2.2 links key mitigation measure(s) - which have been integrated into the Plan - to the potential significant adverse effects of implementing the Plan, if unmitigated. The integration of these measures into the Plan occurred over a number of iterations and was

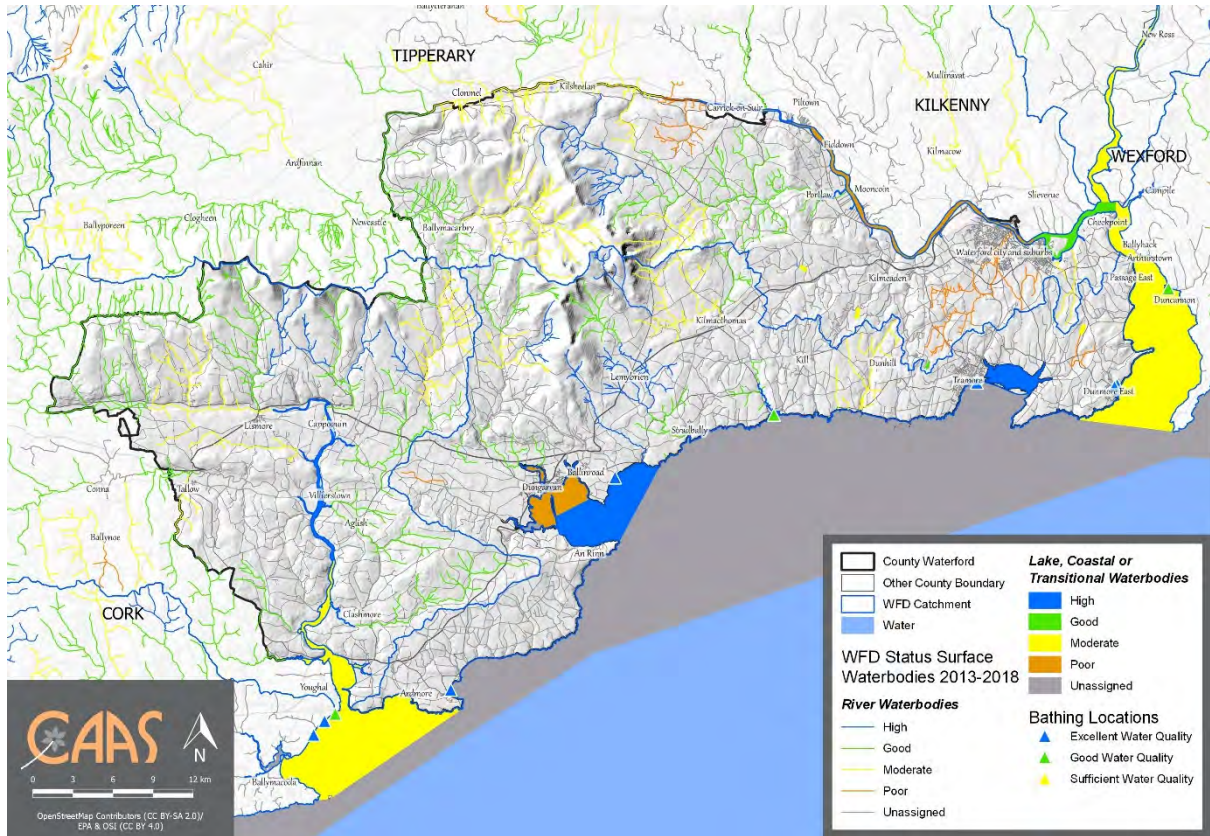


European Sites within and adjacent to the Plan area

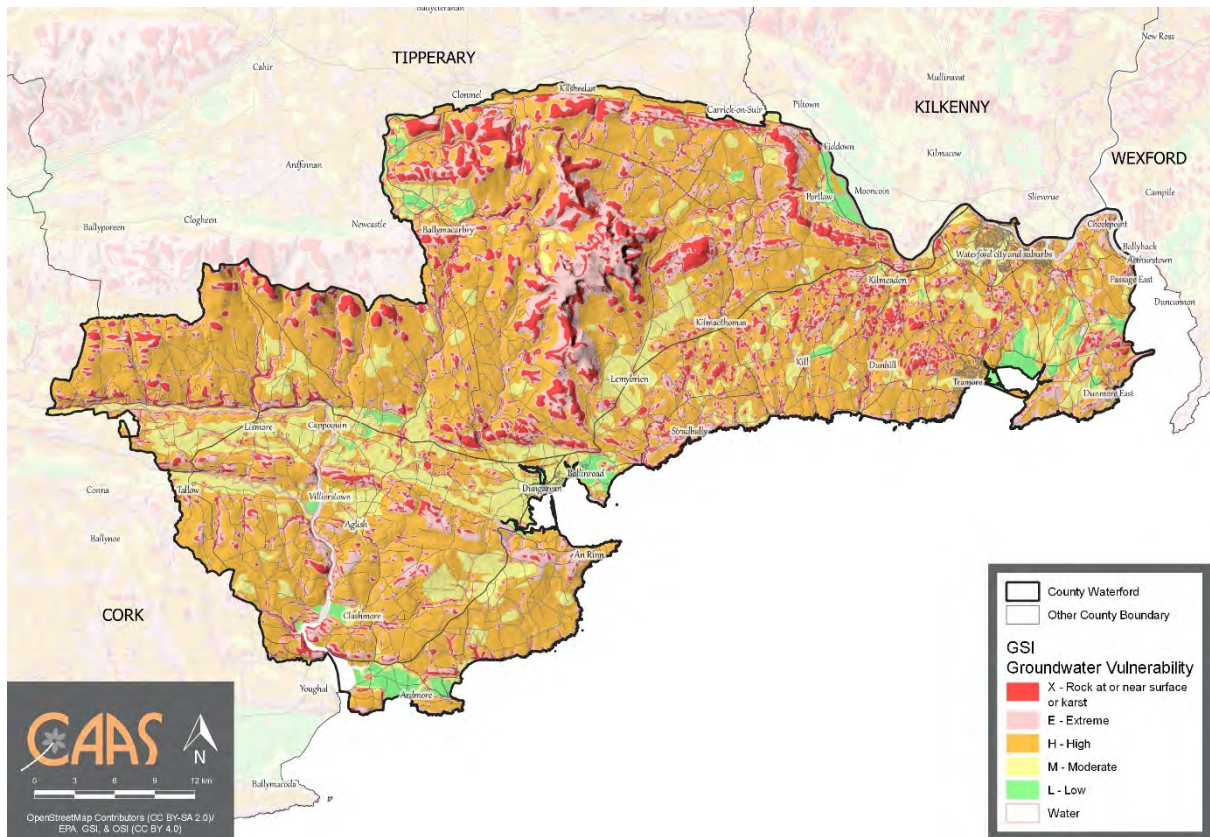


Other Ecological Designations within and adjacent to the Plan area

Figure 2.1 Selection of Individual Environmental Sensitivities taken into account (1 of 3)

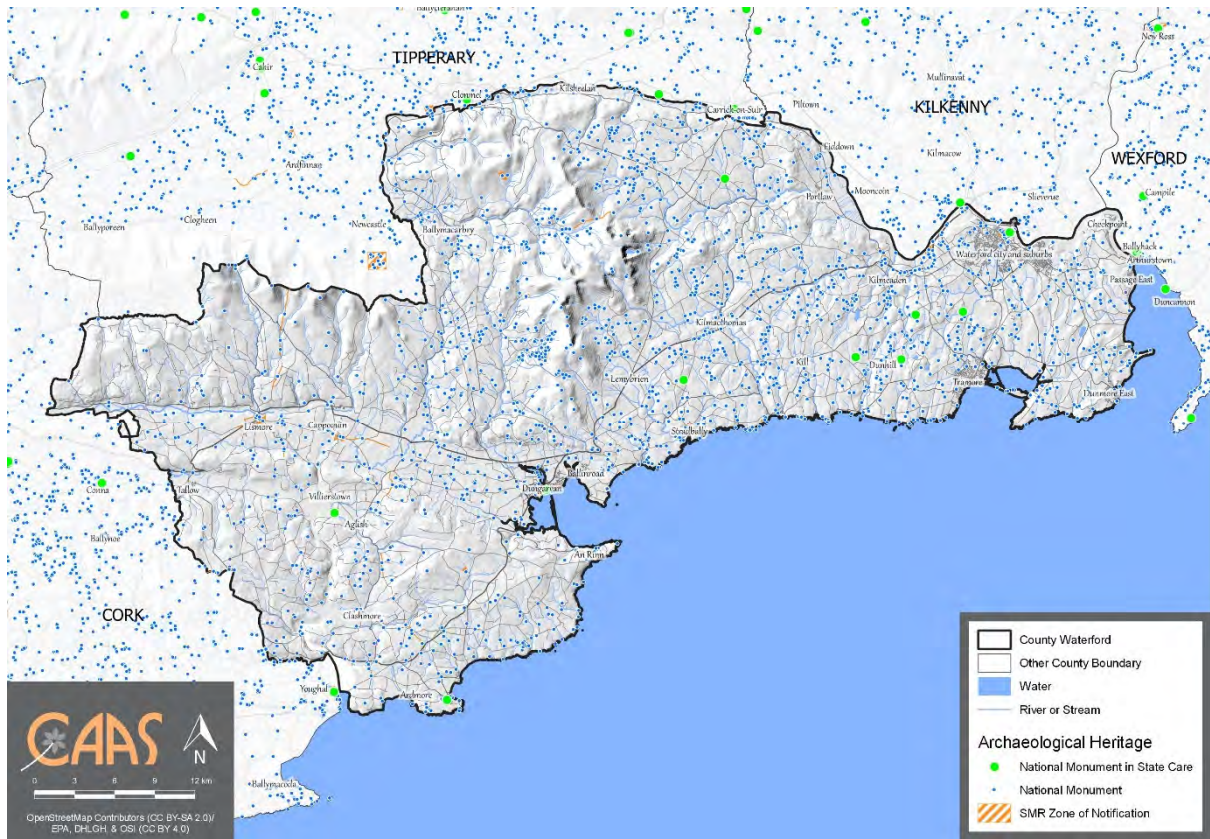


Surface Water Status

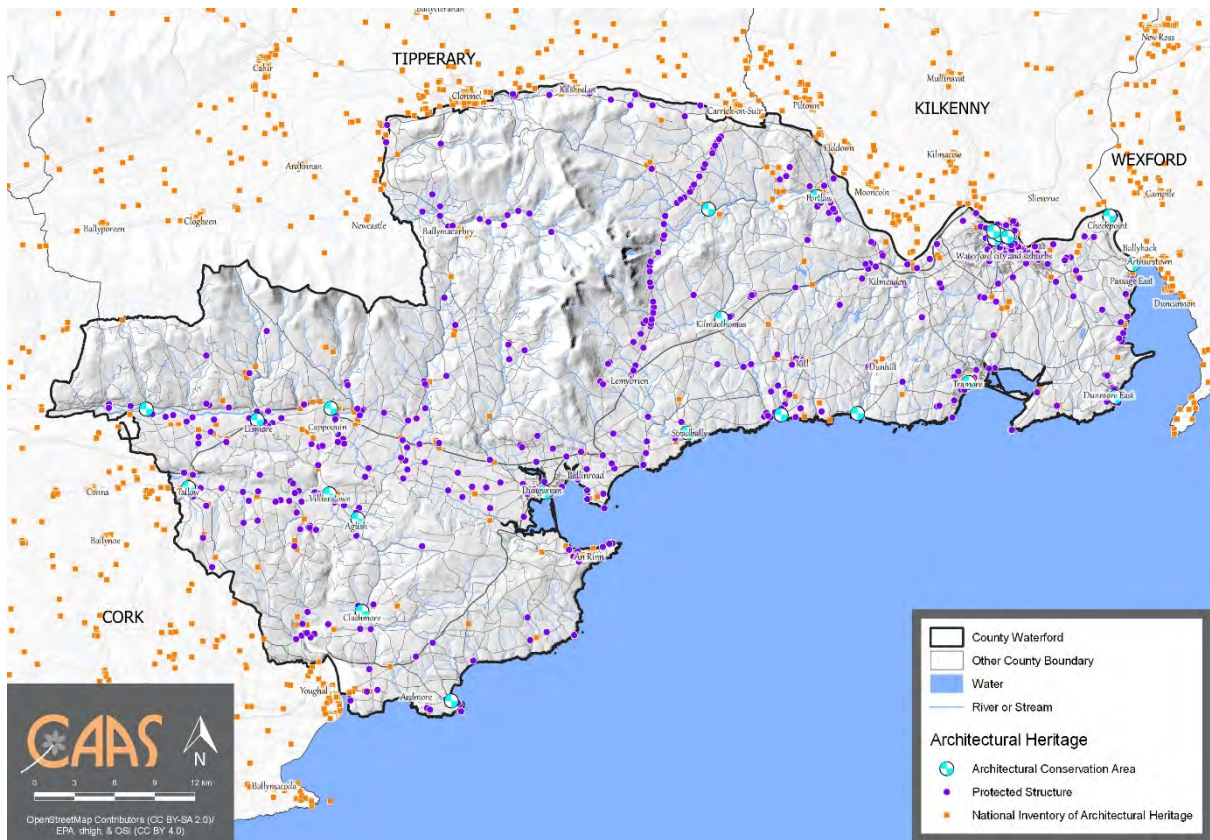


Groundwater Vulnerability

Figure 2.2 Selection of Individual Environmental Sensitivities taken into account (2 of 3)



Archaeological Designations



Architectural Designations

Figure 2.3 Selection of Individual Environmental Sensitivities taken into account (3 of 3)

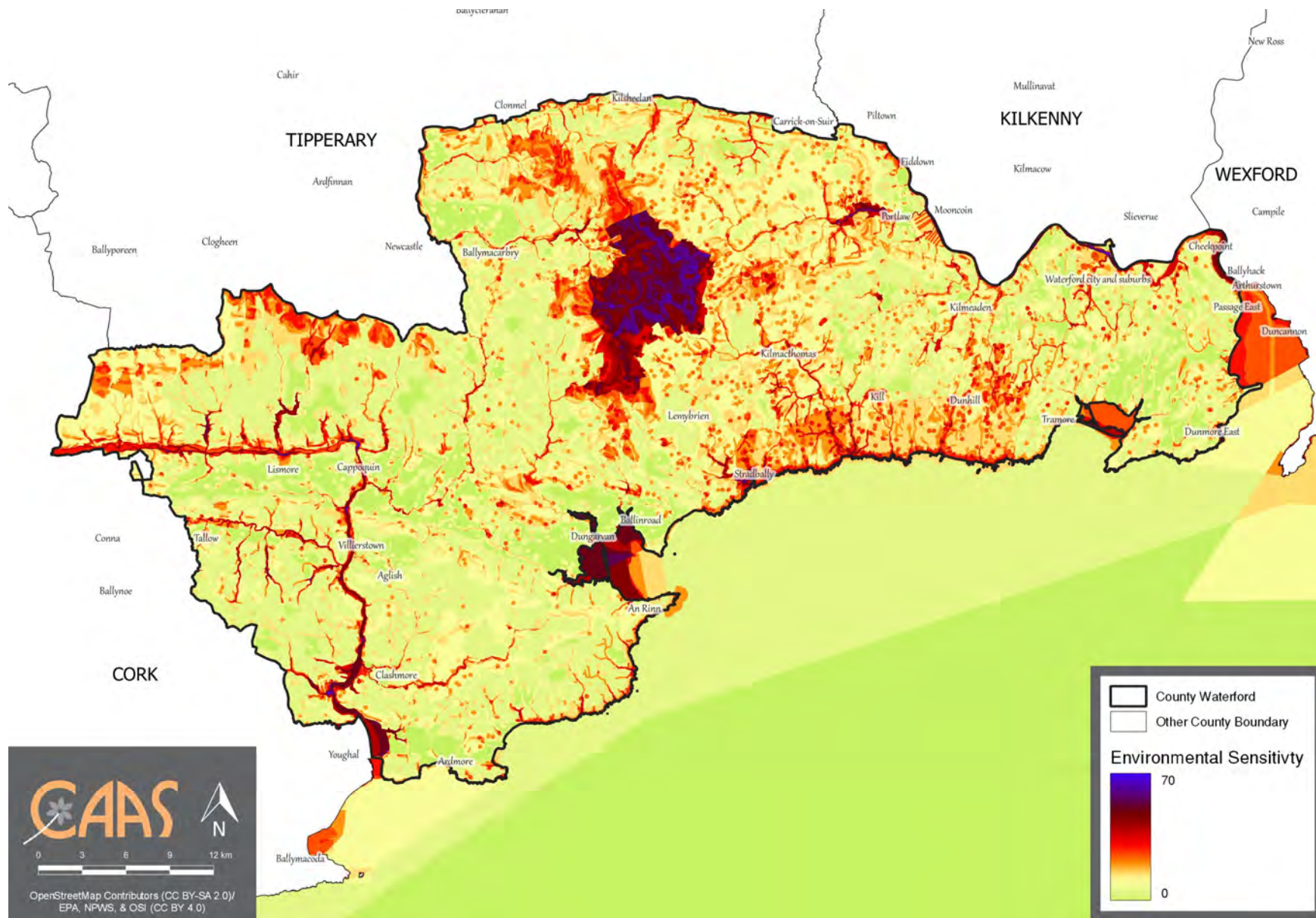


Figure 2.4 Overlay of Environmental Sensitivities

Table 2.2 Integration of Environmental Considerations

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
Various – see below	Various – see below	<p>Core Strategy Strategic Aims</p> <p>4. To require, where appropriate, all plans and projects to comply with the requirements of the Strategic Environmental Assessment Directive, the Habitats Directive, Water Framework Directive and Floods Directive. Protect the integrity all Natura 2000 sites, (p) NHA's and locally important Biodiversity Sites in Waterford.</p> <p>8. Implement the Waterford City and County Council Climate Adaptation Strategy 2019 (as amended) and promote a climate resilient pattern of development and land uses which assists in achieving national climate change mitigation and adaption targets.</p> <p>11. To enhance the sense of place throughout settlements in Waterford and deliver 10 minute neighbourhoods through enhanced pedestrian and cycle permeability and mixed land use planning.</p> <p>Core Strategy Policy Objectives</p> <p>CS 06 We will require, where appropriate, all plans and projects within Waterford to comply with the requirements of the Strategic Environmental Assessment Directive, the Habitats Directive, Water Framework Directive and Floods Directive.</p> <p>Waterford City and MASP Policy Objectives</p> <p>W City 26 We will ensure that the growth of the city takes place in an infrastructure led manner that is Transport-Orientated and sustainable in terms of integrated land use and transportation planning and which reduces congestion, air pollution and enhances the quality of the urban environment...</p> <p>UTL 21 Construction and Environmental Management Plan</p> <p>Construction Environment Management Plans shall be prepared in advance of the construction of relevant projects and implemented throughout. Such plans shall incorporate relevant mitigation measures which have been integrated into the Plan and any lower tier Environmental Impact Statement or Appropriate Assessment. CEMPs typically provide details of intended construction practice for the proposed development, including:</p> <ol style="list-style-type: none"> location of the sites and materials compound(s) including area(s) identified for the storage of construction refuse; location of areas for construction site offices and staff facilities; details of site security fencing and hoardings; details of on-site car parking facilities for site workers during the course of construction; details of the timing and routing of construction traffic to and from the construction site and associated directional signage; measures to obviate queuing of construction traffic on the adjoining road network; measures to prevent the spillage or deposit of clay, rubble or other debris; alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public right of way during the course of site development works; details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels; containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained (such bunds shall be roofed to exclude rainwater); disposal of construction/demolition waste and details of how it is proposed to manage excavated soil, including compliance with 'Best Practice Guidelines for the preparation of Resource Management Plans for Construction & Demolition Waste Projects' EPA: 2021, (or any final updates thereof); a water and sediment management plan, providing for means to ensure that surface water runoff is controlled such that no silt or other pollutants enter local water courses or drains; details of a water quality monitoring and sampling plan; if peat is encountered - a peat storage, handling and reinstatement management plan; measures adopted during construction to prevent the spread of invasive species (such as Japanese Knotweed); appointment of an ecological clerk of works at site investigation, preparation and construction phases; and details of appropriate mitigation measures for lighting specifically designed to minimise impacts to biodiversity, including bats. <p>Corridor and Route Selection Process</p> <p>New roads and other transport infrastructure projects (including greenways, blueways and cycleways) referred to by this Plan that are not already provided for by plans/programmes other than the City and County Development Plan or are not already permitted, are subject to the undertaking of feasibility assessment, taking into account planning need, environmental sensitivities as identified in the SEA Environmental Report and the objectives of the Plan relating to sustainable mobility. Where feasibility is established, a Corridor and Route Selection Process will be undertaken where appropriate, for relevant new road infrastructure in two stages: Stage 1 – Route Corridor Identification, Evaluation and Selection; and Stage 2 – Route Identification, Evaluation and Selection.</p>
Biodiversity and flora and fauna	<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, 	<p>Regulatory Framework and Decision Making Policy Objectives</p> <p>ENV 01 Through implementation of the development plan we will cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management, including compliance with EU Directives - including the Habitats Directive (92/43/EEC, as amended), the Birds Directive (2009/147/EC), the Environmental Impact Assessment Directive (2011/92/EU, as amended by 2014/52/EC) and the Strategic Environmental Assessment Directive (2001/42/EC) – and relevant transposing Regulations.</p> <p>ENV 02 Lower levels of decision making and environmental assessment should consider the sensitivities identified in the SEA Environmental Report that accompanies the Plan, including the following:</p> <ul style="list-style-type: none"> Special Areas of Conservation and Special Protection Areas; Features of the landscape that provide linkages/connectivity to designated sites (e.g. watercourses, areas of semi-natural habitat such as linear woodlands

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
	<p>ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;</p> <ul style="list-style-type: none"> Habitat loss, fragmentation and deterioration, including patch size and edge effects; and Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species such as birds and bats. 	<p>etc);</p> <ul style="list-style-type: none"> Natural Heritage Areas and proposed Natural Heritage Areas; Areas likely to contain a habitat listed in Annex 1 of the Habitats Directive; Entries to the Record of Monuments; Entries to the Record of Protected Structures; Architectural Conservation Areas; and, Landscape/amenity designations. <p>ENV 03 The Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out in the SEA Environmental Report and Statement. This will include the preparation of stand-alone SEA Monitoring Reports:</p> <ol style="list-style-type: none"> To accompany the report required of the manager under section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the development plan; On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan. <p>Regulatory Framework and Climate Change Policy Objectives</p> <p>CA 01 To support and implement the policies of the Waterford Climate Adaptation Strategy in collaboration with Waterford Climate Action Team the Climate Action Regional Office (CARO), and review/replace the strategy pursuant to the provisions of the Climate Action Plan 2021 and Low Carbon Development Act.</p> <p>Flood Management Policy Objectives</p> <p>FM 01 Waterford City & Council will work with the OPW, LAWPRO and other agencies at a catchment-level to identify any measures, such as natural water retention measures, that can have benefits for the Water Framework Directive, flood risk management and biodiversity objectives.</p> <p>FM 02 Waterford City & Council will protect floodplains of river catchments in the County and retain them for their flood protection and natural heritage values.</p> <p>Biodiversity Policy Objectives</p> <p>BD 01 We will protect and conserve all sites designated or proposed for designation as sites of nature conservation value (Natura 2000 Network, Ramsar Sites, NHAs, pNHAs, Sites of Local Biodiversity Interest, Geological Heritage Sites, TPOs) and protect ecological corridors and networks that connect areas of high conservation value such as woodlands, hedgerows, earth banks and wetlands.</p> <p>We will contribute towards the protection and enhancement of biodiversity and ecological connectivity, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, the coastline, geological and geo-morphological systems, other landscape features, natural lighting conditions, and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of the Habitats Directive.</p> <p>BD 02 In support of the All-Ireland Pollinator Plan we will seek to maintain and enhance Waterford's biodiversity in favourable conservation condition so that environmental resilience and net gain in biodiversity enhancement and creation are achieved during implementation of this plan.</p> <p>BD 03 All proposed development will be considered in terms of compliance with the standards and legal requirements of the following where they apply;</p> <ul style="list-style-type: none"> Appropriate Assessment of Plans and Projects in Ireland-Guidance for Planning Authorities Department of Housing, Local Government and Heritage (2021). NRA Guidelines on Ecological Impact Assessment (2009) All-Ireland Pollinator Plan (2021) Planning for Watercourses in the Urban Environment (2020) Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites. <p>Natural Heritage N2K Network Policy Objectives</p> <p>BD 04 Appropriate Assessment</p> <p>All projects and plans arising from this Plan will be screened for the need to undertake Appropriate Assessment under Article 6 of the Habitats Directive. A plan or project will only be authorised after the competent authority has ascertained, based on scientific evidence, Screening for Appropriate Assessment, and subsequent Appropriate Assessment where necessary, that:</p> <ol style="list-style-type: none"> The plan or project will not give rise to significant direct, indirect or secondary effects on the conservation objectives of any European site (either individually or in combination with other plans or projects); or The plan or project will have significant adverse effects on the integrity of any European site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or The plan or project will have an adverse effect on the integrity of any European site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000. <p>BD 05 Protection of European Sites</p> <p>Projects giving rise to adverse effects on the integrity of European sites (cumulatively, directly or indirectly) arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall not be permitted on the basis of this plan except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b)</p>

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
		<p>imperative reasons of overriding public interest for the project to proceed; and c) Adequate compensatory measures in place</p> <p>BD 06 Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for European sites involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans. The Local Authority support the preparation and implementation of management plans for the conservation of Natura 2000 sites, pNHAs and Sites of Local Biodiversity as per appropriate.</p> <p>Biodiversity Assessment Policy Objectives</p> <p>BD 07 We will protect plant and animal species and habitats which have been identified by the EU Habitats Directive (1997), EU Bird Directive (1979), Wildlife Act (1976) and Wildlife (Amendment) Act 2000 and the Flora Protection Order (2015) and ensure development does not impact adversely on wildlife species or the integrity and habitat value of the site.</p> <p>BD 08 We will assess all proposed developments at each level of the development planning process from City & County Development Plan, Local Area Plan to project level to determine potential for significant effects on the conservation objectives and /or adverse impact on the integrity of the Natura 2000 network and ensure that the requirements of Articles 6(3) and 6(4) of the Habitats Directive are fully satisfied.</p> <p>BD 9 We will ensure a sufficient level of information is provided in development applications to enable a fully informed assessment of impacts on biodiversity to be made. Ecological impact assessments submitted in support of development proposals shall be carried out by appropriately qualified professionals and ecological survey work carried out at optimal survey time to ensure accurate collation of ecological data.</p> <p>Sites of Biodiversity Value Policy Objectives</p> <p>BD 10 We will prevent unnecessary fragmentation and promote integration of existing green infrastructure such as trees, woodlands, hedgerows, earth banks and wetlands in the design of new development. Proposed development will be encourage to retain and create green corridors within and between built up urban areas along with areas that are not subject to public access so as to promote wildlife habitat value.</p> <p>BD 11 We will mitigate potential adverse impacts on existing biodiversity and green infrastructure in development proposals through requirement for biodiversity enhancement measures such as habitat creation, pollinator friendly landscaping schemes and or nesting boxes for pollinators, birds and mammals.</p> <p>BD 12 We will continue to develop the broader network of habitats through habitat mapping and management planning in collaboration with other agencies to record the range of habitats and network of ecological corridors and integrate this information in the development planning process.</p> <p>BD 13 We will prevent unnecessary noise and light disturbance to wildlife habitats and species by requesting Noise Impact Assessments and Lighting Plans to support development proposals so that wildlife friendly lighting specifications and avoidance of unnecessary noise are incorporated in early design stage of development schemes.</p> <p>BD 14 To promote sustainable and creative proposals in lighting and display technologies. All external lighting should be down lighting and should be time limited where possible. Lighting should be avoided in sensitive wildlife areas and light pollution avoided. All external light proposals should be accompanied by a light pollution study and deviations to the objective will only be considered where the applicant can clearly show that the proposed light solution would result in a more sustainable solution.</p> <p>Wetland Policy Objectives</p> <p>BD 15 We will ensure that Waterford's floodplains, wetlands and watercourses are retained for their biodiversity and flood protection values and maintain good ecological status of wetlands and watercourses in support of the provisions of the Water Framework Directive and Ramsar Convention.</p> <p>BD 16 We will protect wetland sites listed in Appendix A11 and other wetlands that may be identified of biodiversity value from infilling and other developments that may affect the biodiversity value of these sites.</p> <p>BD 17 The preservation of riparian corridors is a requirement for the protection of aquatic habitats and facilitation of public access to waterways. Development proposals will be required to avoid culverting of river channels while maintaining a buffer zone of at least 15m between the development works and the top of the riverbank. We will consult with Inland Fisheries Ireland and LAWPRO on the establishment and protection of riparian habitats where appropriate.</p> <p>Drainage or Reclamation of Wetlands</p> <p>BD 18 We will implement the relevant parts of the Planning and Development (Amendment) (No. 2) Regulations 2011 and the European Communities (Amendment to Planning and Development) Regulations 2011, which require planning permission to be applied for where the area impacted by works relating to the drainage or reclamation of a wetland exceeds 0.1 hectares or where such works may have a significant effect on the environment. Such applications for permission would need to be supported by an Appropriate Assessment where necessary.</p> <p>Peatlands</p> <p>BD 19 We will support the implementation of any relevant recommendations contained in the National Peatlands Strategy 2015. Developments sited on peatlands have the potential to increase overall carbon losses, potentially undermining expected carbon savings (in the case of renewable energy developments) and damaging rare habitats of European importance. It is recommended that when developing project proposals for developments on peatlands assessments are undertaken that consider:</p> <ul style="list-style-type: none"> • Peatland stability; • Carbon emissions balance; and • Hydrology and Ecology. <p>Hedgerow Policy Objectives</p> <p>BD 20 To protect hedgerows in all new developments, particularly species rich roadside and townland boundary hedgerows, such features should be incorporated into the open space provisions at the concept design stage. There will be a presumption against the removal of hedgerows however where their removal is unavoidable replacement planting shall involve establishment of new hedgerows with native species of local provenance and that support pollinating species.</p> <p>Trees & Woodlands Policy Objectives</p> <p>BD 21 We will preserve and enhance the amenity and biodiversity value of the County and City by preserving as far as possible trees, woodlands and hedgerows and will consider Tree Preservation Orders in order to protect trees of significance throughout the City and County. Existing TPOs are listed in Appendix 11. Trees of Special Amenity</p>

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
		<p>Value are listed in Appendix 11.</p> <p>BD 22 To implement the Waterford City and County Tree Management Strategy 2021 and review as appropriate.</p> <p>BD 23 Where development proposals require felling of mature trees a comprehensive tree survey carried out by a suitably qualified arborist shall be submitted assessing the condition, ecological and amenity value of the treestock proposed for removal and mitigation planting and management scheme. We will seek in all cases to ensure when undertaking development or when permitting development that the loss of or damage to existing trees is minimised.</p> <p>BD 24 To ensure when planning to undertake development or when considering the approval or authorisation of development that adequate information to assess the impact of the proposed development on existing trees, including tree surveys and planting and management schemes, is provided and that the protection, preservation and management of existing trees of amenity value, and the implementation of a planned planting and management scheme, are provided for.</p> <p>BD 25 We will continue to enhance our public realm and general amenity of the City and County through the continued maintenance and provision of trees in the urban environment with a view to providing continuity of tree cover where possible throughout our urban centres and promoting the use of native species where possible, with varied species and age distribution.</p> <p>BD 26 We will carry out an audit of all trees of special amenity value and TPOs, as listed in Appendix 11., with a view to updating same.</p> <p>Forestry Policy Objectives</p> <p>F 01 We will encourage the replanting and extension of woodland cover, in particular mixed forests and broadleaf forests, in order to ensure the preservation and enhancement of the arboreal landscape in the County</p> <p>F 02 We will support the economic, recreational and carbon sequestration potential of forestry. Forestry as a land use and its ancillary development will be encouraged in appropriate locations subject to such development not impacting on biodiversity/protected species such as Freshwater Pearl Mussel, interfering with significant views or prospects or being unduly obtrusive in the landscape.</p> <p>F 03 We will promote a greater mix of species in Forestry Plantations and to encourage greater structural and spatial diversity in plantation design and enhanced biodiversity and habitat value. We will facilitate afforestation in appropriate locations in co-operation with the Forest Service and Coillte and in accordance with the principles of Sustainable Forest Management codes of best practice and the Waterford Climate Adaptation Strategy and updates of these.</p> <p>F 04 We will co-operate with landowners, Coillte and the Forest Service in promoting greater public access and recreational use of state and privately owned forests in Waterford.</p> <p>F 05 To ensure that linear felling of trees is not encouraged in exposed or scenic areas and also promote phased rather than clear felling.</p> <p>Invasive Species Policy Objectives</p> <p>BD 27 We will support, as appropriate, the National Parks and Wildlife Service's efforts to seek to control and manage the spread of non-native invasive species on land and water. Where the presence of non-native invasive species is identified at the site of any proposed development or where the proposed activity has an elevated risk of resulting in the presence of these species, details of how these species will be managed and controlled will be required. Where development is approved for sites containing known invasive species, we will consider, where appropriate, the use of conditions for control and removal of invasive species.</p> <p>BD 28 We will promote awareness of invasive species and appropriate management, and work with other agencies to address the issue.</p> <p>Blue Green Infrastructure Policy Objectives</p> <p>BGI 01 To conserve, manage and enhance the natural heritage, biodiversity, landscape and environment of Waterford in recognition of its importance as a non-renewable resource and as a natural asset for health and well-being of our communities.</p> <p>BGI 02 To establish BGI as a key component in the planning process and designing the future for Waterford so that environmental resilience is achieved through implementation of this plan.</p> <p>BGI 03 We will develop a BGI Strategy the City and County during the lifetime of this plan.</p> <p>BGI 04 We will assess all proposals for development with the aim of no net loss of biodiversity and to achieve gain for BGI and ecosystem services. In particular we will:</p> <ul style="list-style-type: none"> • Promote the retention and creation of open drainage ditches instead of underground pipes where appropriate as these provide additional habitats and water source for wetland species; and, • Promote the integration of Sustainable Drainage Systems (SuDS) in design concept and layout. <p>BGI 05 We will continue to invest in the maintenance and enhancement of BGI and support the provision of new parks, green space corridors and other public open spaces across our urban and rural settlements.</p> <p>Amenity Asset Management Policy Objective</p> <p>BGI 12 We will commission an integrated management plan and management structure addressing recreation, conservation, landscape and socio-economic development issues in Waterford's uplands.</p> <p>BGI 16 Visitor and Habitat Management</p> <p>Where relevant, the Council and those receiving permission for development under the Plan shall seek to manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects, including loss of habitat and disturbance. Management measures may include ensuring that new projects and activities are a suitable distance from ecological sensitivities. Visitor/Habitat Management Plans will be required for proposed projects as relevant and appropriate.</p> <p>BGI 17 Increases in Visitor Numbers to Semi-Natural Areas</p> <p>Seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that new any projects, such as greenways, are a suitable distance from ecological sensitivities, such as riparian zones.</p>

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
Population and human health	<ul style="list-style-type: none"> Potential adverse effects arising from flood events. Potential interactions if effects arising from environmental vectors. 	<p>ECON 20 SEVESO III Sites</p> <p>We will take into account the provisions of the Major Accidents Directive, relating to the control of major accident hazards involving dangerous substances, and the recommendations of the Health and Safety Authority in the assessment of all planning applications located within the consultation distance of such sites.</p>
Soil	<ul style="list-style-type: none"> Potential adverse effects on the hydrogeological and ecological function of the soil resource, including as a result of development on contaminated lands. Potential for riverbank and coastal erosion. 	<p>Natural Heritage and Environmental Quality Policy Objectives</p> <p>ENV 05 Soil Protection, Contamination and Remediation</p> <p>Ensure that adequate soil protection measures are undertaken where appropriate. Adequate and appropriate investigations shall be carried out into the nature and extent of any soil and groundwater contamination and the risks associated with site development work, where brownfield development is proposed.</p> <p>The EPA's publication Code of Practice: Environmental Risk Assessment for Unregulated Waste Disposal Sites (2007) shall be taken into account as relevant by proposals for development within or adjacent to old landfill sites.</p> <p>All undeveloped, contaminated sites shall be remediated to internationally accepted standards prior to redevelopment. All applications shall be accompanied by a report from a qualified, expert consultant remediation incorporating international best practice and expertise on innovative ecological restoration techniques including specialist planting and green initiatives that create aesthetically improved sites, healthy environments and contribute to the provision of new green open spaces as integral parts of newly created areas.</p> <p>Treatment/management of any contaminated material shall comply as appropriate with the Waste Management Act 1996 (waste licence, waste facility permit), as amended, and under the EPA Act 1992 (Industrial Emissions licensing, in particular the First Schedule, Class 11 Waste), as amended. These measures will ensure that contaminated material will be managed in a manner that removes any risk to human health and ensures that the end use will be compatible with any risk.</p> <p>Prior to the grant of approval on contaminated sites, developers will be required to carry out a full contaminated land risk assessment to demonstrate:</p> <ul style="list-style-type: none"> How the proposed landuses will be compatible with the protection of health and safety (including the durability of structures and services) - during both construction and occupation; and How any contaminated soil or water encountered will be appropriately dealt with. <p>Geology Policy Objectives</p> <p>G 01 We will contribute towards the appropriate protection and maintenance of the character, integrity and conservation value of features or areas of geological interest. We will protect from inappropriate development the scheduled list of Geological Heritage Sites detailed in Appendix 11.</p> <p>G 02 We will protect and promote the geological heritage of the UNESCO Copper Coast Geopark and support the work of the Geopark to ensure it retains and adds value to its designation status as a UNESCO Geopark.”.</p>
Water	<ul style="list-style-type: none"> Potential adverse effects upon the status of water bodies and entries to the WFD Register of Protected Areas (ecological and human value), arising from changes in quality, flow and/or morphology. Increase in flood risk and associated effects associated with flood events. 	<p>Natural Heritage and Flood Management Policy Objectives</p> <p>NH 05 Waterford City & Council will work with the OPW, LAWPRO and other agencies at a catchment-level to identify any measures, such as natural water retention measures, that can have benefits for the Water Framework Directive, flood risk management and biodiversity objectives.</p> <p>NH 06 Waterford City & Council will protect floodplains of river catchments in the County and retain them for their flood protection and natural heritage values.</p> <p>Natural Heritage and Water Quality Policy Objectives</p> <p>NH 07 Water Framework Directive and associated legislation</p> <p>We will contribute towards, as appropriate, the protection of existing and potential water resources, and their use by humans and wildlife, including rivers, streams, wetlands, the coastline, groundwater and associated habitats and species in accordance with the requirements and guidance in the EU Water Framework Directive 2000 (2000/60/EC), the European Union (Water Policy) Regulations 2003 (as amended), the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (as amended), the Groundwater Directive 2006/118/EC and the European Communities Environmental Objectives (groundwater) Regulations 2010 (as amended) and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same). To support the application and implementation of a catchment planning and management approach to development and conservation, including the implementation of Sustainable Drainage System techniques for new development.</p> <p>NH 08 In order to maintain water quality at high status and a return to good status for rivers that are not meeting this threshold at present we will:</p> <ul style="list-style-type: none"> Provide for the efficient and sustainable use and development of water resources and water services infrastructure. Manage and conserve water resources in a manner that supports a healthy society, economic development requirements and a cleaner environment. Ensure that all development does not negatively impact on water quality and quantity, including surface water, ground water, designated source protection areas, river corridors and associated wetlands, estuarine waters, coastal and transitional waters. Ensure new development complies with the relevant EPA Code of Practice: Wastewater Treatment and Disposal Systems Serving Single Houses (2009) or any amendments thereto. Screen planning applications according to their Water Framework Directive status and have regard to their status and objectives to achieve 'good' status or protect and improve 'high or good status'. A catchment based approach shall be applied to the assessment of planning applications which may impact on water quality, and to ensure that the development would not result in a reduction in the water quality status of a waterbody in that catchment. Seek to protect, enhance and restore all groundwaters and ensure a balance of abstraction and recharge, with the aim of achieving good groundwater status and to reverse any significant and sustained upward trends in the concentration of pollutants in groundwater. Work with the Local Authority Waters Programme and other relevant State agencies and local communities to achieve the objectives for the Areas for Action identified in the River Basin Management Plans 2018-2021 and 2022-2027 to ensure that new development do not result in a deterioration of water quality

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
		<p>in these areas.</p> <ul style="list-style-type: none"> Develop the associated Blue Dot Catchment network programme under the River Basin Management Plan 2018-2021 to protect and maintain the excellent quality of 'High' status water bodies. <p>NH 09 River Basin Management Plan</p> <p>Support the implementation of the relevant recommendations and measures as outlined in the River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Proposed plans, programmes and projects shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands. Also, to have cognisance of, where relevant, the EU's Common Implementation Strategy Guidance Document No. 20 and 36 which provide guidance on exemptions to the environmental objectives of the Water Framework Directive.</p> <p>NH 10 Catchment-sensitive farming practices</p> <p>We will encourage the use of catchment-sensitive farming practices, in order to meet Water Framework Directive targets and comply with the River Basin Management Plan.</p> <p>NH 11 We will maintain Bathing Water standards in line with the EU Bathing Water Directive and increase the number of blue flag beaches.</p>
Air and Climatic Factors	<ul style="list-style-type: none"> 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 quality. Potential conflicts between increased frequency of noise emissions and protection of sensitive receptors. Potential conflicts with climate adaptation measures including those relating to flood risk management. 	<p>Natural Heritage and Environmental Quality Policy Objectives</p> <p>ENV 01 Air and Energy</p> <p>We will contribute towards compliance with air quality legislation; greenhouse gas emission targets; management of noise levels; and reductions in energy usage.</p> <p>ENV 02 CAFE Directive</p> <p>Promote the preservation of best ambient air quality compatible with sustainable development in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) and ensure that all air emissions associated with new developments are within Environmental Quality Standards as out in the Air Quality Standards Regulations 2011 (SI No. 180 of 2011) (or any updated/superseding documents).</p>
Material Assets	<ul style="list-style-type: none"> Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to adequately treat surface water run-off that is discharged to water bodies (water services infrastructure and capacity ensures the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water (water services infrastructure and capacity ensures the 	<p>UTL 02 Water Services</p> <p>To collaborate support and work, in conjunction with Irish Water, to ensure the timely delivery and provision, extension and upgrading of existing and new high quality, climate resilient, water services infrastructure, in order to facilitate the sustainable growth and development of our City and County, in accordance with an ecosystem services and integrated catchment management approach, and the Development Plan Core and Settlement strategies.</p> <p>UTL 03 Water Supply and Drinking Water Regulations</p> <p>We will collaborate with Irish Water in contributing towards compliance with the European Union (Drinking Water) Regulations Drinking Water Regulations 2014 (as amended) and compliance of water supplies with the parameters identified in these Regulations.</p> <p>All new developments must be satisfactorily served by either a mains water supply, or by a private water supply. The preferred option will always be a public water supply and drainage solution. It will be the responsibility of the developer to demonstrate that any new supply is adequate to serve the proposed development and that for domestic use, it is safe to be consumed as drinking water. Groundwater abstractions must comply with EPA policies and guidelines.</p> <p>UTL 04 Drinking Water Report for Public Water Supplies</p> <p>In conjunction with Irish Water, we will have regard to the EPA 2020 publication "Drinking Water Report for Public Water Supplies 2019" (and any subsequent update) in the establishment and maintenance of water sources in the County.</p> <p>UTL 05 EPA's Remedial Action List</p> <p>In conjunction with Irish Water, undertake recommendations made by the EPA arising from any failure to meet drinking water standards and any enlistment on the EPA's Remedial Action List.</p> <p>UTL 06 Urban Waste Water Treatment Regulations</p> <p>We will collaborate with Irish Water in contributing towards compliance with the relevant provisions of the Urban Waste Water Treatment Regulations 2001 and 2004 and the Waste Water Discharge (Authorisation) Regulations 2007 as amended.</p> <p>It is the Council's preference that all new development connect to existing public wastewater treatment facilities without the need for upgrades being required to the facilities, and wastewater network connections are provided by the developer. Development will only be permitted in instances where there is sufficient capacity for</p>

Topic	Potentially Adverse Effect, if Unmitigated	Significant Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
	<p>mitigation of potential conflicts).</p> <ul style="list-style-type: none"> Increases in waste levels. Potential impacts upon public assets and infrastructure. Interactions between agriculture and soil, water, biodiversity and human health - including phosphorous and nitrogen deposition as a result of agricultural activities and the production of secondary inorganic particulate matter. 	<p>appropriate collection, treatment and disposal (in compliance with the Water Framework Directive and River Basin Management Plan) of waste water. All new developments shall ensure that:</p> <ul style="list-style-type: none"> A separate foul and surface water drainage system is provided - the discharge of additional surface water to existing combined (foul and surface water) sewers is prohibited in order to maximise the capacity of these collection systems for foul water. Where permitted, private wastewater treatment plants, are operated in compliance with: <ul style="list-style-type: none"> 2021 Code of Practice for Domestic Waste Water Treatment Systems EPA, as may be amended. EPA Wastewater Treatment Manuals – Treatment Systems for Small Communities, Business, Leisure Centres and Hotels (1999) and EPA Guidance on the Authorisation of Discharges to Groundwater (EPA 2011), as may be amended. <p>Where a connection to public drainage infrastructure is demonstrated to be unfeasible, and/ or is not available, alternative developer-provided infrastructure, developed in collaboration with the Local Authority or otherwise, may be required/ facilitated if it is satisfactorily demonstrated that disposal of foul water can be achieved without negative impacts on public health, amenity or the environment. The detailed design of any such alternative developer provided infrastructure to service new development within our settlements should meet the technical requirements of Irish Water and may be considered in the following order of priority preferences:</p> <ol style="list-style-type: none"> Where the proposed development exceeds the capacity of the existing treatment plant, the developer shall provide for the upgrade of the treatment plant and connection to the public network. This may be best achieved in settlements such as Lemybrien where the existing ICW can be extended as a low tech/low risk design solution. (Note from table 1 attached the Irish Water proposal to upgrade the WWTP in Lemybrien as part of the STVGP) Where no existing public treatment system exists (certified or otherwise), the developer shall be responsible for developing a new ICW – preferably outside the respective settlement boundary. Such provision will involve the laying of a new network. Where no, or inadequate, public waste-water treatment facilities exist, serviced sites within or immediately adjoining the settlement may be supported. In such instances, serviced site developments on 0.20 hectares (½ acre) plots with individual treatment systems will be required as a temporary measure, until such time as waste-water facilities become available. The serviced sites must be designed to permit the subdivision of each of the 0.20 hectare plots into two 0.10 hectare sites once adequate services become available. The residual land can then be developed for additional serviced sites in the future. Risk and maintenance lies with the individual home owner. <p>Planning permission may be granted on the condition that private drainage infrastructure may be used temporarily, with the requirement to connect to public drainage infrastructure when it becomes available. Note: As per Section 5.3 of the Draft Water Services Guidelines for Planning Authorities, ‘Alternative solutions such as private wells or waste water treatment plants should not generally be considered by planning authorities.</p> <p>UTL 07 Water Conservation To require that developments incorporate demand management and water conservation measures such as rain water harvesting and grey water use, among all users, to minimise wastage of water supply, and as viable alternatives to attenuation, and to support Irish Water in implementing water conservation measures such as leakage reduction and network improvements.</p> <p>UTL 08 Protection of Water Resources To work together with Irish Water towards a common goal of protecting our drinking water sources. This will be achieved by:</p> <ul style="list-style-type: none"> Supporting the preparation and implementation of Drinking Water Protection Plans by Irish Water, to protect sources of public water supply, in accordance with the requirements of the Water Framework Directive; Having regard to the EPA 2019 publication ‘Drinking Water Report for Public Water Supplies 2018’ (and any subsequent update) in the establishment and maintenance of water sources in the County in conjunction with Irish Water; Protecting both ground and surface water resources including taking account of the impacts of climate change, the cumulative impacts of septic tanks and waste water treatment systems, and to work with and support Irish Water to develop and implement Water Safety Plans to protect sources of public water supply and their contributing catchment. <p>UTL 09 Storm and Surface Water Management To require the use of Nature Based Solutions and Sustainable Drainage Systems to minimise and limit the extent of hard surfacing and paving, and require the use of SuDS measures to be incorporated in all new development (including roads and public realm works and extensions to existing developments). Surface water drainage must be dealt with in a sustainable manner, in ways that promote its biodiversity value, and in ways that avoid pollution and flooding, through the use of an integrated SuDS (including integrated constructed wetlands), where appropriate. This includes runoff from major construction sites. Development proposals shall be accompanied by a SuDS assessment, which includes details of run-off quantity and quality and impacts on habitat and water quality, and shall demonstrate how runoff is captured as close to source as possible with subsequent slow release to the drainage system and watercourse, as well as the incorporation of appropriate measures to protect existing water bodies and remove pollutant materials. The detail of the assessment should be commensurate with the scale of the development proposed. Storm/ surface water management and run-off design should be carried out in accordance with Sustainable Urban Drainage Systems (SuDS) standards such as:</p> <ul style="list-style-type: none"> ‘The SuDS Manual’ (CIRIA, 2015), ‘Sustainable Drainage: Design and Evaluation Guide’ (McCloy Consulting & Robert Bray Associates); ‘Dublin Corporation Stormwater Management Policy Technical Guidelines’; ‘Greater Dublin Regional Code of Practice for Drainage Works’ incorporating ‘Greater Dublin Strategic Drainage Study, Volume 2, New Development’ or any future updates; and The capacity and efficiency of the strategic road network drainage regimes in County Waterford will be safeguarded for national road drainage purposes. <p>In all instances the use of Nature Based Solutions is preferred to engineered solutions. Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas: Water Sensitive Urban Design Best Practice Interim Guidance Document</p>	

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			<p>2022 (DHLG&H) and updates of same.</p> <p>UTL 10 Flooding/ SFRA To reduce the risk of new development being affected by possible future flooding by:</p> <ul style="list-style-type: none"> • Avoiding development in areas at risk of flooding, • Where possible, reducing the causes of flooding to and from existing and future development; • Increase the application of SuDS such as permeable paving, bioretention/infiltration ponds, swales and Natural Water Retention Measures, and the identification of existing areas which may be suitable for temporary storage/overflow of water during heavy storms; • Where development in floodplains cannot be avoided, taking a sequential approach to flood risk management based on avoidance, reduction and adaptation to the risk; and, • Ensuring that all proposals for development falling within Flood Zones A or B are consistent with the “The Planning System and Flood Risk Management – Guidelines for Planning Authorities 2009”, “Climate Action and Low Carbon Development Act” (2021), and any amendment thereof, and the “Waterford Strategic Flood Risk Assessment” (2021) as included in Appendix 13 • To support the making of Local Area Plan for larger urban centres we will prepare surface water management plans where adequate data exists to support their preparation. Where data is lacking we will carry out a data review gap analysis and prepare conceptual surface water management plans as an initial step. Proposals for development identified as being vulnerable to flooding must be supported by a site specific Flood Risk Assessment, and demonstrate to the satisfaction of the Planning Authority that the development and its infrastructure will avoid significant risks of flooding and not exacerbate flooding elsewhere. <p>We will support the development of new flood relief schemes by the OPW, in particular those at Aglish, Ballyduff and Dungarvan & Environs while protecting public investment in flood relief schemes as detailed in section 4.4.3 of the SFRA (Appendix 13).</p> <p>UTL 11 Flood Plains To contribute towards the improvement and/or restoration of the natural flood risk management functions of flood plains subject to compliance with the environmental legislation and availability of resources, and ensure each flood risk management activity is examined to determine actions required to embed and provide for effective climate change adaptation as set out in the OPW Climate Change Sectoral Adaptation Plan Flood Risk Management applicable at the time.</p> <p>UTL 17 Waste Services (Infrastructure & Management) The Council will continue to promote and facilitate the principles of the circular economy in minimising waste going to landfill and maximise waste as a resource, with prevention, preparation for reuse, recycling and recovery prioritised in that order, over the disposal of waste. This will be assisted by:</p> <ul style="list-style-type: none"> • Promoting and facilitating high quality sustainable waste recovery and disposal infrastructure/ technology at appropriate locations in Waterford, subject to the protection of the amenities of the surrounding environment including European Sites, guidelines incorporated into the new Regional Waste Management Plan, the siting guidance ‘Waste Management Infrastructure – Guidance for Siting Waste Management Facilities’ that will be incorporated into the new National Waste Management Plan for a Circular Economy and in keeping with the EU waste hierarchy; • Continuing to facilitate and promote the provision of civic amenity sites, including ‘bring centres’ for the purposes of providing a collection point for the recycling of domestic waste, subject to siting, location, compatibility with adjacent land uses and other relevant development management criteria. • Requiring the facilitation of bring centres in larger retail developments. • Requiring, where necessary, Project Construction and Demolition Waste Management Plans as part of applications for development in accordance with “Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects” (DoEHLG, 2006). Such plans should be submitted for developments above the thresholds stated in these guidelines, and as required by the Planning Authority. • Ensuring all developments have adequate space to facilitate storage and segregation of waste arising from the development. • Supporting the implementation of the Southern Region Waste Management Plan 2015-2021 (SRWMP) and any updates made thereto, including through the assessment of planning applications by reference to the SRWMP siting and development guidelines for waste infrastructure. <p>UTL 20 Waste Management Regulations and Closed Landfills The Council shall continue to fulfil its duties under the Waste Management (certification of historic unlicensed waste disposal and recovery activity) Regulations 2008 (S.I. No 524 of 2008), including those in relation to the identification and registration of closed landfills.</p> <p>UTL 22 We will safeguard the environment by seeking to ensure that residual waste is disposed of appropriately. All waste arising during construction will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts and the Southern Waste Management Plan 2015-2021.</p> <p>UTL 23 We support the minimisation of waste creation and promote a practice of reduce, reuse and recycle where possible.</p>
Cultural Heritage	<ul style="list-style-type: none"> • Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities 		<p>Heritage Strategic Objectives</p> <ul style="list-style-type: none"> • To identify, protect, manage and enhance the rich qualities of the built, cultural and natural heritage of the City and County, and to encourage its sensitive and appropriate integration into the sustainable development of our places for the benefit of present and future generations. The Plan seeks to achieve a balance between the foregoing and economic prosperity and social integration. • To seek the protection, sustainable management and enhancement of Waterford’s built heritage; to promote the appropriate regeneration and reuse of our historic structures which strengthen a sense of place; to promote awareness and enjoyment of our built heritage for the present and future generations. <p>Heritage Policy Objectives</p> <p>Heritage 01 To implement and review the Waterford Heritage Plan in partnership with all relevant stakeholders and subject to available resources.</p> <p>Heritage 02 To support the objectives of Heritage Ireland 2030 in relation to Communities and Heritage, Leadership and Heritage and Heritage Partnerships.</p>

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		<p>Built Heritage Policy Objectives</p> <p>BH 01 We will promote the protection of the architectural heritage of the City and County through the identification of structures of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, by the inclusion of such structures on the Record of Protected Structures (RPS) and by taking such steps as are necessary to ensure the protection of those structures, their maintenance, conservation, enhancement, and appropriate active use. To this end we will contribute towards the protection of architectural heritage by complying, as appropriate, with the legislative provisions of the Planning and Development Act 2000 (as amended) in relation to architectural heritage and the policy guidance contained in the Architectural Heritage Protection Guidelines 2011 (and any updated/superseding document).</p> <p>BH 02 It is the policy of the Council:</p> <ul style="list-style-type: none"> • To promote the sustainable reuse of protected structures for any such purpose compatible with the character of the structure. The Planning Authority may, where considered appropriate, relax use zoning and other site development restrictions and may grant exemption from or reduce the amounts of development contributions payable in order to secure the protection and conservation of protected structures or historic structures within ACAs and by way of reduction of development levies for improvements to Protected Structures. These restrictions may be relaxed and development contributions reduced or exempted where the protected structure will be rehabilitated to a high standard, where the special interest, character and setting of the building is protected and where the proposed use and development is consistent with conservation policies and the proper planning and sustainable development of the area. In such cases the proposed development shall be open for consideration notwithstanding the current zoning objective for the site and therefore shall be considered as not materially contravening the Development Plan. • To administer incentives for the protection of the architectural heritage of the City and County through administration of the Built Heritage funding schemes or similar Department of Housing Local Government and Heritage funding schemes • To advise with regard to best conservation practice as per Architectural Heritage Protection Guidelines for Planning Authorities 2011 available on https://www.waterfordcouncil.ie/departments/culture-heritage/heritage/protected-structures.htm and Department of Housing Local Government and Heritage Advice Series available on https://www.buildingsofireland.ie/resources/. <p>BH 03 We will issue Section 57 Declarations on request to owners or occupiers of protected structures detailing the type of works that it is considered would or would not materially affect the character of the structure or of any element of the structure which contributes to its special interest.</p> <p>BH 04 Proposals for the demolition of a Protected Structure may be considered in exceptional circumstances and the onus will be on the developer to provide the strongest justification for such an action as per the Heritage Protection Guidelines for Planning Authorities and other guidance.</p> <p>BH 05 It is the policy of the Council to:</p> <ul style="list-style-type: none"> • Achieve the preservation of the special character of places, areas, groups of structures setting out Architectural Conservation Areas (ACA). • Protect the special heritage values, unique characteristics and distinctive features, such as shopfronts within the ACA from inappropriate development which would detract from the special character of the ACA. • Prohibit the demolition of historic structures that positively contributes to the distinctive character of the ACA. • Encourage the undergrounding of overhead services and the removal of redundant wiring/cables within an ACA and to assesses all further cable installations against its likely impact on the character of the ACA as the cumulative impact of wiring can have a negative impact on the character of ACAs. • Provide guidelines on appropriate development to retain its distinctive character; and protect elements of the streetscape such as rubblestone boundary walls, planting schemes and street furniture such as paving, post boxes, historic bollards, basement grills, street signage/plaques, etc. which make a positive contribution to the built heritage; • Retain or sensitively reintegrate any surviving items of historic street furniture and finishes such as granite kerbing and paving that contribute to the character of an ACA. <p>BH 06 It is the policy of the Council when considering development which may have a significant impact on a protected structures, its setting or curtilage or have an impact on an ACA, that the proposal be accompanied by an architectural heritage impact assessment (AHIA) detailing the potential impact of the development on the architectural heritage. The report should be compiled in accordance with the details set out in Appendix B of the Architectural Heritage Protection Guidelines for Planning Authorities, Department of the Environment.</p> <p>BH 07 It is the policy of the Council</p> <ul style="list-style-type: none"> • to identify and implement measures for promoting the character of the historic cores of the city, towns and villages, their unique identity and their architectural, archaeological, historical and cultural, social interest and diversity in order for them to be a good area to work, live and visit. <p>BH 08 It is a policy of the Council</p> <ul style="list-style-type: none"> • To encourage sympathetic development or reuse of historic buildings to promote heritage led economic growth and regeneration whilst not adversely detracting from the building or its setting. Any proposals shall respect features of the special architectural and historic character by appropriate design, materials, scale, and setting. <p>BH 09 Ecological Impact Assessment</p> <p>It is the policy of the Council to request an ecological impact assessment where development may have an adverse impact on protected wildlife species such as bats or nesting birds. The incorporation of biodiversity enhancement measures shall be a requirement in repair works to existing or design of new developments”.</p> <p>BH 10 It is the policy of the Council</p> <ul style="list-style-type: none"> • To facilitate appropriate, high-quality design solutions for adaptations of Protected Structures and historic buildings in an ACA that carefully consider the design, height, scale, massing, and finishes of adjacent buildings.

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Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
		<p>BH 11 It is the policy of the Council</p> <ul style="list-style-type: none"> To protect structures and curtilages included in the RPS or historic structures within ACA, from any works which would visually or physically detract from the special character of the main structure, any structures within the curtilage, or the streetscape or landscape setting of the ACA. <p>BH 12 It is the policy of the Council</p> <ul style="list-style-type: none"> To ensure the protection of the settings and vistas of Protected structures, and historic buildings within and adjacent to ACAs from any works which would result in the loss or damage to their special character. <p>BH 13 It is the policy of the Council</p> <ul style="list-style-type: none"> To encourage the sensitive redevelopment of vacant or derelict sites within the ACA and historic cores of the city, towns and villages whilst promoting a high standard design which respects urban plots, roof lines vistas and streetscape. <p>BH 14 It is the policy of the Council to:</p> <ul style="list-style-type: none"> Encourage the sensitive redevelopment and reuse of the ground floor shop units of Protected structures or buildings in the historic cores for other uses including residential whilst retaining the shopfront façade, windows and doorways to upper floors Promote the sustainable reuse and refurbishment of vacant upper floors of buildings in the historic core for residential use through incentives such as the Repair and Lease Scheme. <p>BH 15 It is the policy of the Council to</p> <ul style="list-style-type: none"> Ensure that all original and traditional shopfronts which contribute positively to the appearance and character of a streetscape are retained and restored and new shopfronts are well designed, through the sympathetic use of scale, proportion and high quality materials. <p>BH 16 It is the policy of the Council to</p> <ul style="list-style-type: none"> Promote and ensure the conservation and reuse of traditional materials and features. Original building fabric such as rubblestone and brick walls, lime mortar render, natural slate, thatch, chimneys, brick detailing, ironwork and joinery details such as timber sash windows, shopfronts, doorways and bargeboards shall be retained. Where traditional features such as timber sliding sash windows have been removed, their reinstatement shall be encouraged. Encourage the retention and development of the traditional skills base in County Waterford and maintain the Conservation Skills register. <p>BH 17 We will publish guidelines for best practice in the care of historic shopfronts during the lifetime of the development plan.</p> <p>BH 18 It is a policy of Council to:</p> <ul style="list-style-type: none"> Protect and promote the setting and visual amenity of historic gardens and designed landscapes. Protect all elements of historic gardens and designed landscapes including structures, tree planting schemes, manmade features such as waterways, boundary features within the attendant grounds of Protected Structures. Proposed development which have the potential to visually or physically impact on the character and/or the appearance of an historic designed landscape should be justified through a Design Landscape Assessment /Architectural Heritage Impact Assessment. <p>BH 19 We will assess the need to establish additional areas for designation as ACA for Demesnes and to extend the boundaries of the existing ACAs having regard to their special architectural, historic, archaeological, artistic, cultural, scientific, social or technical interest or value or contribution to the appreciation of protected structures and settings and vistas.</p> <p>BH 20 It is a policy of the Council</p> <ul style="list-style-type: none"> To protect and promote the sustainable reuse and development within large complexes such as workhouses, school, barracks, convents, abbeys, hospitals included in the RPS, and that such proposals would be justified through an overall Conservation Plan. <p>BH 21 It is the Policy of the Council to</p> <ul style="list-style-type: none"> identify, protect and encourage the sympathetic reuse of elements of the industrial heritage and to encourage sustainable reuse of underutilised/vacant industrial buildings for residential, commercial or tourism use. All development proposals for industrial buildings and sites of industrial archaeological importance must be accompanied by an archaeological assessment of the building(s) and their surrounding environment. In all cases the retention and/or incorporation of industrial buildings will be encouraged and only in exceptional circumstances will demolition be considered. <p>BH 22 During the life of the development plan we will:</p> <ul style="list-style-type: none"> Update the Industrial Heritage of Waterford Survey (2008) Survey our maritime heritage which includes quays, harbours, river quays and walls, and navigation aids. <p>BH 23 It is the policy of the Council to:</p> <ul style="list-style-type: none"> Support and implement the objectives of: <ul style="list-style-type: none"> The Climate Change Sectoral Adaptation Plan (2019) for built and archaeological heritage, The Waterford Climate Action Plan (2019) in building resilience for our historic sites and buildings from climate change. Department of Environment, Heritage and Local Government's publication on 'Energy Efficiency in Traditional Buildings' (2010). The Irish Standard IS EN 16883:2017 'Conservation of Cultural Heritage - Guidelines for Improving the Energy Performance of Historic Buildings' (2017). Any future advisory documents in assessing proposed works on Protected Structures. Promote the just transition to a low carbon and climate resilient society in the interest of sustainability and to reduce landfill by acknowledging the embodied energy retention and reuse of our historic building stock. Promote the appropriate rehabilitation, revitalization and reuse of vernacular buildings, and town houses, wherever feasible, employing best conservation practice and using traditional building methods and materials such as timber windows in the interest of sustainability, good conservation practice and

Topic	Potentially Significant Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
		<p>maintaining the long-term viability of such buildings and their associated features and improve their resilience to climate change</p> <ul style="list-style-type: none"> • Ensure that measures to upgrade the energy efficiency of historic buildings acknowledge their inherent characteristics, techniques and materials and do not have a detrimental physical or visual impact on the building or its character • Support appropriate and well-informed energy efficiency upgrades to structures on the Record of Protected Structures and historic buildings through the dissemination of factual and relevant information to the general public. • Identify the built and archaeological heritage in local authority ownership and areas at risk from climate change including, but not necessarily restricted to, the Record of Monuments and Places, protected structures and architectural conservation areas designated in the development plan. <p>BH 24 It is the policy of the Council to:</p> <ul style="list-style-type: none"> • Protect, maintain and enhance the historic character and setting of vernacular buildings, farmyards and settlements • Encourage appropriate revitalisation and reuse of such structures (see rural diversification/tourism). There will be a presumption against the demolition of vernacular buildings where restoration or adaptation is a feasible option. • Promote the protection and maintenance of thatched buildings (domestic or non-domestic), particularly those with historic layers and roof structures. <p>BH 25 During the life of the development plan we will:</p> <ul style="list-style-type: none"> • Update the Thatch House survey of County Waterford • Promote available grant schemes and facilitate engagement with owners in the maintenance of these buildings. <p>BH 26 It is a policy of the council to</p> <ul style="list-style-type: none"> • Encourage and facilitate the sensitive reuse of vernacular houses or farm buildings for farm diversification, agritourism and rural development, including self-catering accommodation, arts or craft workshops and small-scale manufacturing. Guidance and information can be found in Traditional Buildings for Irish Farms (2005) published by the Heritage Council and Teagasc, and Reusing Farm Buildings: A Kildare Perspective (2006) published by Kildare County Council. <p>BH 27 It is the policy of the Council where proposals for sensitive rehabilitation of disused vernacular buildings in the open countryside are being considered they will not be required to establish a rural housing need provided that their vernacular character is enhanced and that their fabric is repaired using appropriate techniques and materials. Where the subject structure is demolished a rural housing need will be required.</p> <p>BH 28 It is the policy of the Council to ensure that where permission is sought to demolish a structure which is considered of vernacular significance, on the grounds of structural defects or failure, or that it is not reasonably capable of being made structurally sound, the developer will be required to submit a report by a professional with appropriate conservation expertise and an understanding of vernacular buildings which demonstrate substantial reasons for the demolition. It must be satisfactorily demonstrated that every effort has been made to continue the present use or find a suitable new use for the structure(s).</p> <p>BH 29 It is the policy of the council to ensure that where it is proposed to extend an existing vernacular house/ building, the design, scale, footprint and materials should be sympathetic to the existing building and its setting. Extensions should:</p> <ul style="list-style-type: none"> • generally be located to the rear and not obscure the form or layout of the existing building; • substantial removal of walling should be avoided; • connecting the existing building and extension should minimise the number of new openings and ideally use existing openings; and, • Where feasible outbuilding contiguous to a dwelling can sometimes be successfully incorporated. <p>BH 30 It is the policy of the Council to:</p> <ul style="list-style-type: none"> • To promote a high standard of civic amenity and design and to respect existing open spaces, urban spaces, settings, vistas street furniture and streetscape within historic cores. The Council shall consider the receiving environment when erecting signage, undertaking road markings, providing traffic control measures bike lanes, parking spaces, planting and road and footpath access works, and ensures that all such works are sensitive to the to the distinctive character of the area and streetscape. • Preserve the retention of historic items of street furniture where these contribute to the character of the area, including items of a vernacular or local significance. • Ensure street furniture and signage is kept to a minimum, is of high quality design and material and that any redundant street furniture is removed. <p>BH 31 We will protect and preserve the integrity and enhance elements of the built heritage such as limekilns, quays, bollards, bridges and their settings.</p> <p>BH 32 It is a policy of the Council</p> <ul style="list-style-type: none"> • To demonstrate best practice with regard to Protected Structures, Recorded Monuments and other elements of architectural and archaeological heritage in the ownership and care of the Council and to ensure appropriate materials and methodologies are used for the repair works. <p>BH 33 During the life of the development plan we will carry out an audit of all protected structures in our ownership with a view to securing uses that are compatible with the character of the individual protected structure.</p> <p>BH 34 It is the policy of the Council to promote public awareness of the value of our historic built heritage and our archaeology and the positive contribution protected structures, historic structures and archaeology make to the built environment, the sense of place, distinctiveness and authenticity of an area and the tourism potential to Waterford and to develop specific measures to achieve such awareness.</p> <p>BH 35 We will continue the publication of architectural/archaeological guides series such Historic Waterford – The Coast , Architectural Waterford, Heritage Tourism Guides on line (or via app).</p> <p>Archaeological Heritage Policy Objectives</p> <p>AH 01 It is the policy of the Council to protect, and enhance in an appropriate manner all elements of the archaeological heritage including the following categories:</p> <p>a) Sites and monuments included in the Sites and Monuments Record as maintained by the Department with responsibility for the protection of Ireland's archaeological heritage.</p>

Topic	Potentially Adverse Effect, if Unmitigated	Significant if Recommendations integrated into the Plan, included in:
		<p>b) Monuments and places included in the Record of Monuments and Places (RMP) as established under the National Monuments Acts.</p> <p>c) Historic monuments and archaeological areas included in the Register of Historic Monuments as established under the National Monuments Acts.</p> <p>d) National Monuments subject to Preservation Orders under the National Monuments Acts and National Monuments which are in the ownership or guardianship of the Minister with responsibility for archaeological heritage or a local authority.</p> <p>e) Archaeological objects within the meaning of the National Monuments Acts.</p> <p>f) Wrecks protected under the National Monuments Acts or otherwise included in the Shipwreck Inventory maintained by the National Monuments Service, underwater archaeology, riverine, coastal or lacustrine locations.</p> <p>g) Archaeological features not as yet identified but which may be impacted on by development.</p> <p>And where feasible, appropriate and applicable to promote access (including disabled access) to and signposting and interpretive material of such sites and monuments and provide appropriate forms of virtual access where physical access is not possible.</p> <p>AH 02 We will contribute, as appropriate, towards the protection and sympathetic enhancement of archaeological heritage, in particular by implementing the relevant provisions of the Planning and Development Act 2000 (as amended) and the National Monuments Act, 1930 (as amended). We will ensure that archaeological excavation is carried out according to best practice as outlined by the National Monuments Service, Department of Housing, Local Government and Heritage, the National Museum of Ireland and the Institute of Archaeologists of Ireland. We will consult with the National Monuments Service as relevant in relation to proposed developments, including those adjoining archaeological sites.</p> <p>AH 03 It is the policy of the Council</p> <ul style="list-style-type: none"> Waterford City & County Council shall, in an appropriate manner, secure either by preservation in-situ or preservation-by-record, the archaeological heritage. In this regard priority shall be given to the preservation in-situ of any archaeological monument/site/place as the first option considered. If preservation in-situ cannot be achieved, or can only be achieved in-part, then preservation-by-record of elements of the archaeological heritage will be required –this will require the full archaeological excavation and recording of the monument/site, according to best professional practice. Where excavation is required this shall also include the preparation of appropriate reports, post-excavation analyses and publications. The costs of assessing and mitigating archaeological impacts shall form part of development costs as borne by the developer. <p>AH 04 It is the policy of the Council to:</p> <p>Ensure that development in the vicinity of a site of archaeological interest shall be designed and sited sympathetically and shall not be detrimental to the character of the archaeological site or its setting by reason of its location, scale, bulk or detailing.</p> <ul style="list-style-type: none"> When considering development in the vicinity of all archaeological sites including remnants of the city and town walls, the planning authority will require the preparation of an archaeological assessment detailing the potential impact of any development on upstanding structures, buried structures and deposits. The report will also include a visual impact assessment to ensure adequate consideration of any potential visual impact the proposed development may have on any upstanding remains. Proposed developments will be required to retain the existing street layout, including laneways, historic building lines and traditional plot widths where these derive from medieval or earlier origins. When considering development in the vicinity of upstanding archaeological/historical monuments, to aim to achieve a satisfactory buffer area between the development and the monument in order to ensure the preservation and enhancement of the amenity associated with the presence of upstanding monuments within the historic urban pattern. For all developments, which have potential to impact on riverine, intertidal and sub-tidal environments to require an archaeological assessment prior to works being carried out. In addition to planning permission, development works at National Monuments of which the Minister or local authority is owner of, guardian of or in respect of which a preservation order is in force, may also require Ministerial Consent under Section 14 of the National Monuments Act 1930 (as amended) and this will be determined by the relevant authority (Department of Housing, Local Government & Heritage) on application. <p>AH 05 We will protect the essential character and setting of the City Walls and Towers through the control of the design, location and layout of new development in their vicinity and through the control of changes of use of lands, by the protection of adjoining streetscapes and site features where appropriate and by protecting important views to and from the walls and towers from obstruction and/or inappropriate intrusion by new buildings structures, plant and equipment, signs and other devices; and where opportunities arise to create additional views of the walls and towers. We will continue to protect enhance and promote the City Walls by updating the City Walls Plan (2014) and implement an Interpretation Plan for Waterford Medieval City Walls and Towers.</p> <p>AH 06 We will deliver the actions of the Woodstown Viking Site Conservation Management Plan 2020, in collaboration with the Woodstown Steering Committee and all relevant Stakeholders.</p> <p>AH 07 It is a policy of the Council to</p> <ul style="list-style-type: none"> Utilise Waterford's archaeology such as its City Walls and Towers as an educational and tourism resource and to facilitate the publication and dissemination of interpretative material to the general public, and to facilitate public access to the walls and towers and other sites of interest. Promote the incorporation of or reference to significant archaeological finds in a development, where appropriate, through layout, displays, signage, plaques, information panels or use of historic place names. <p>AH 08 It is the policy of the Council</p> <ul style="list-style-type: none"> to apply best practice in the care and management of historic graveyards as detailed in the guidance document on the "Care, Conservation and Recording of Historic Graveyards in County Waterford" published by Waterford County Council in 2009 and the Department of Housing, Local Government and Heritage Advice Series Places of Worship available on https://www.buildingsofireland.ie/app/uploads/2019/10/Places-of-Worship-The-Conservation-of-Places-of-Worship-2011.pdf

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Topic	Potentially Adverse Effect, if Unmitigated	Recommendations integrated into the Plan, included in:
		<p>AH 09 We will promote community archaeology projects such as the Adopt a Monument Scheme and avail of funding to support same in the interests of conserving sites and monuments in the city and county.</p>
<p>Landscape</p>	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of designations relating to the landscape. 	<p>Landscape Policy Objectives</p> <p>L 01 National Landscape Strategy We will support provisions of the 2014 National Landscape Strategy and provide for the sustainable management of all of County Waterford's landscapes including archaeological landscapes, waterway corridors, coastal, upland, rural and peri-urban landscapes.</p> <p>L 02 Protecting our Landscape and Seascape We will protect the landscape and natural assets of the County by ensuring that proposed developments do not detrimentally impact on the character, integrity, distinctiveness or scenic value of their area and ensuring that such proposals are not unduly visually obtrusive in the landscape, in particular, in or adjacent to the uplands, along river corridors, coastal or other distinctive landscape character units.</p> <p>L 03 Landscape and Seascape Character Assessment We will assess all proposals for development outside of our settlements in terms of the 2020 Landscape and Seascape Character Assessment (Appendix 8) and the associated sensitivity of the particular location. We will require a Landscape and Visual Impact Assessment (LVIA) for proposed developments with the potential to impact on significant landscape features within the City and County. Proposals for significant development (e.g. renewable energy projects, telecommunications and other infrastructure and the extractive industry) shall be accompanied by a LVIA which includes Zones of Theoretical Visibility (ZTV) which indicate the landscape impact zone within which the proposed development may be seen. There will be a presumption against developments which are located on elevated and exposed sites and where the landscape cannot accommodate such development with reasonable and appropriate mitigation.</p> <p>LS 04 Scenic Routes and Protected Views We will protect the scenic routes and specified protected views identified in our Landscape Character Assessment (Appendix 8), including views to and from the sea, rivers, landscape features, mountains, landmark structures and urban settlements from inappropriate development that by virtue of design, scale, character or cumulative impact would block or detract from such views.</p>

Section 3 Environmental Report and Submissions/ Observations

3.1 Introduction

This section details how both the Environmental Report and submissions and observations made to Waterford City and County Council on the Environmental Report and SEA process have been taken into account during the preparation of the Plan and the SEA.

3.2 SEA Scoping Notices and Submissions

As part of the scoping process for preparation of the Plan, environmental authorities³ were notified that a submission or observation in relation to the scope and level of detail of the information to be included in the Environmental Report could be made to the Council.

Submissions were made by the Environmental Protection Agency, the Department of Communications, Climate Action and Environment and the Department of Culture, Heritage and the Gaeltacht in response to the SEA Scoping Notices. The issues raised in these submissions and how these issues have been taken into account during preparation of the Plan and the SEA are provided on Table 3.1 below. Taking into account these submissions included integrating environmental considerations into the Plan, including through the selection of Plan provisions identified on Table 2.2).

³ The following authorities were notified (the names of some of the authorities have changed since notification was provided as a result of changes in Ministerial responsibilities across Departments): Department of Agriculture, Food and the Marine; Department of Culture, Heritage, and the Gaeltacht; Department of Communications, Climate Action and Environment; Department of Housing, Planning and Local Government; Environmental Protection Agency; Cork County Council; Tipperary County Council; Kilkenny County Council; and Wexford County Council.

Table 3.1 Taking into account SEA Scoping Submissions

No.	Submission text	Response
1 SEA scoping submission from the Environmental Protection Agency		
A	We acknowledge your notice in relation to the Pre-Draft Public Consultation on the proposed Waterford City and County Development Plan 2021-2027 (the 'Plan').	Noted.
B	The EPA is one of five statutory environmental authorities under the SEA Regulations. In our role as an SEA environmental authority, we focus on promoting the full and transparent integration of the findings of the Environmental Assessment into the Plan and advocating that the key environmental challenges for Ireland are addressed as relevant and appropriate to the plan. Our functions as an SEA environmental authority do not include approving or enforcing SEAs or plans.	Noted.
C	As a priority, we focus our efforts on reviewing and commenting on key sector plans. We again attach our guidance document ' <i>SEA of Local Authority Land Use Plans – EPA Recommendations and Resources</i> '. This document is updated regularly and sets out our key recommendations for integrating environmental considerations into Local Authority land use Plans. We recommend that you take this guidance document into account in preparing the Plan and SEA.	The ' <i>SEA of Local Authority Land Use Plans – EPA Recommendations and Resources</i> ' document have been considered in the preparation of this SEA Scoping Report and will be kept on file for reference throughout the SEA process.
D	<p>Available Guidance & Resources</p> <p>Our website contains various SEA resources and guidance, including:</p> <ul style="list-style-type: none"> - SEA process guidance and checklists - Inventory of spatial datasets relevant to SEA - topic specific SEA guidance (including Good practice note on Cumulative Effects Assessment (EPA, 2020), Guidance on SEA Statements and Monitoring (EPA, 2020), Integrating climatic factors into SEA (EPA, 2019), Developing and Assessing Alternatives in SEA (EPA, 2015), and Integrated Biodiversity Impact Assessment (EPA, 2012) <p>You can access these resources at: www.epa.ie/monitoringassessment/assessment/sea/</p>	Available online EPA resources, including mapping resources, and guidance have been considered in the preparation of this report and will be considered throughout the SEA and AA processes.
E	<p>State of the Environment Report – Ireland's Environment 2016</p> <p>In preparing the Plan and SEA, the recommendations, key issues and challenges described within our most recent State of the Environment Report Ireland's Environment – An Assessment 2016 (EPA, 2016) should be considered, as relevant and appropriate to the Plan.</p>	The recommendations, key issues and challenges described within Ireland's Environment will be considered in the preparation of the Plan.
F	<p>Transition to a low carbon climate resilient economy and society</p> <p>You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation, as well as relevant sectoral, regional and local adaptation plans.</p>	The SEA will seek to ensure that the Plan aligns with national commitments on climate change mitigation and adaptation, as well as relevant sectoral, regional and local adaptation plans.
G	<p>EPA SEA WebGIS Tool</p> <p>Our SEA WebGIS Tool, available through the EDEN portal (https://gis.epa.ie/EIS_SEA/), allows public authorities to produce an indicative report on key aspects of the environment in a specific geographic area. It is intended to assist in SEA screening and scoping exercises.</p>	Available online EPA resources, including mapping resources, and guidance have been considered in the preparation of this report and will be considered throughout the SEA and AA processes.
H	<p>Environmental Authorities</p> <p>Under the SEA Regulations, you should also consult with:</p> <ul style="list-style-type: none"> • The Minister for Housing, Planning and Local Government, • The Minister for Agriculture, Food and the Marine, and the Minister for Communications, Climate Action and Environment, where it appears to you as the competent authority that the plan or programme, or modification to a plan or programme, might have significant effects on fisheries or the marine environment, • The Minister for Culture, Heritage and the Gaeltacht where it appears to you as the competent authority that the plan or programme, or modification to a plan or programme, might have significant effects in relation to the architectural or archaeological heritage or to nature conservation, and • any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, proposed variation or local area plan. 	Notice has also been given to relevant environmental authorities as part of the SEA scoping process.

No.	Submission text	Response
2 SEA Scoping Submission from the Department of Communications, Climate Action and Environment (Geological Survey Ireland)		
A	<p>We note, with appreciation, that the SEA Scoping document makes reference to the Copper Coast Geopark and its County Geological Sites under the section 3.4 Soil. Since the adoption of the current Waterford City and County Development Plan, Geoparks have been elevated to UNESCO Global Geoparks, thus making them equal in status to World Heritage Sites. We suggest making the reference to the Geopark and the County Geological Sites more prominent as this is a major international status to have in the County. In addition to Geoheritage data, Geological Survey Ireland provides information on all aspects of the geology of Ireland on our Map Viewer available on the GSI website www.gsi.ie. There are multiple layers of data available including Geology, Groundwater, Quaternary (landscape features), Landslides, and the Tellus data. The Tellus geophysical survey took place over Waterford since the adoption of the current CDP also and it gives information suitable for this report. Our newest map is the Physiographic Units map and this is especially designed to give information on land use. We would encourage the use of our Map Viewer when preparing the SEA, as well as looking at the section on County Waterford to see all our publications related to the County. We would be happy to assist in any sections related to the data sets we hold.</p> <p>Geological Survey Ireland is the national earth science agency and has datasets on Bedrock Geology, Quaternary Geology, Geological Heritage Sites, Mineral deposits, Groundwater Resources and the Irish Seabed. These comprise maps, reports and extensive databases that include mineral occurrences, bedrock/mineral exploration groundwater/site investigation boreholes, karst features, wells and springs. Please see our website for data availability.</p>	<p>To provide additional information on the Geopark AND County Geological Sites in the SEA Environmental Report, including mapping and the following description:</p> <p>United Nations Educational, Scientific and Cultural Organisation (UNESCO) Global Geoparks are single, unified geographical areas where sites and landscapes of international geological significance, managed with a holistic concept of protection, education and sustainable development. They strive to raise awareness of geodiversity and promote protection, education and tourism best practices.</p> <p>The Copper Coast UNESCO Global Geopark covers geological and cultural heritage of the historic 19th century metal mines, extending approx. 17 km along the coast in County Waterford.</p> <p>Whilst Global Geopark is not a legislative designation, the key heritage sites within a Geopark must be protected under local, regional and national legislation as appropriate.</p> <p>To reference relevant GIS datasets in the SEA ER and provide mapping of Groundwater Resources.</p>

No.	Submission text	Response
3 SEA Scoping Submission from the Department of Culture, Heritage and the Gaeltacht		
A	<p>It is recommended that all such relevant and appropriate assessment contain a detailed Cultural Heritage Section that looks to assess all aspects of each individual area within Waterford County and City and its Environs (both for terrestrial and underwater cultural heritage) and thus provide a comprehensive archaeological assessment that will then form part of a strategic assessment process to inform the DP generally and cover potential developments or works that may not be subject to the normal planning process. The potential for previously unrecorded archaeology, and particularly that from an underwater environment, is high for a coastal county such as Waterford, with the earliest city built by the sea and its rivers used as strategic routeways over the centuries. The Waterford landscape, which is primarily a maritime one, is rich in both National Monuments and recorded monuments that are subject to statutory protection under the National Monuments Acts 1930-2014.</p> <p>Appropriate Archaeological Impact Assessments (AIA) or Underwater Archaeological Impact Assessments (UAIA) would be particularly relevant where any Flood Risk Management Scheme is proposed or is to be extended. It is therefore recommended that the SEA and any proposed Flood Risk Management Assessments include assessment of the known and potential cultural heritage in <i>all areas</i> to be covered by the DP. This shall include the known and potential terrestrial and underwater archaeological heritage of all areas that may be the subject of proposed works in the future, including estuarine, marine, riverine and lacustrine locations, etc.</p> <p>An AIA/UAIA can be desk based in the first instance, with the more detailed fieldwork or underwater assessments carried out as part of the statutory planning process, a general assessment, undertaken by a suitably qualified and suitably experienced archaeologist (with underwater/maritime experience regarding the UCH), that shall ensure that future proposed works that fall under both statutory and non-statutory regulations with regard to the planning process, will be addressed. This will inform on the protection of all aspects of the cultural heritage when Waterford County Council considers works or zoning under the new DP.</p> <p>Terrestrial & Underwater Archaeology: In <i>The Record of Monuments and Places (RMP)</i> recorded archaeological sites are to be found within the areas addressed for the proposed DP. These Recorded Monuments are protected under the National Monuments (Amendment) Act 1994. The RMP is not an exhaustive list of all archaeology in existence, and in this regard DCHG would like to draw the applicant's attention to the Department's published policy in relation to the archaeological assessment of large-scale developments on sites where there are no previously recorded monuments (<i>Framework and Principles for the Protection of the Archaeological Heritage</i> – Published by Dúchas The Heritage Service).</p> <p>Similarly, contained within the areas covered are underwater environments, including riverine and estuarine environments. These may contain known and previously unknown underwater archaeological heritage that should be considered in any appropriate assessment to inform the DPs. Such sites can include fortifications with associated slipways, quays, etc., wrecks, fishtraps, lakeside dwellings, fording points, clapper bridges, bridges, causeways, logboats, singular sites such as rock cut platforms and steps, and of course artefactual material associated with sites or as individual cultural objects deposited in underwater environments.</p> <p>It is the policy of national Monuments Service of this Department that proposed developments, due to their location, size, or nature, that may have implications for the archaeological heritage should be subject to archaeological assessment. This should be included in the DP. Such developments include those that are located at or close to an archaeological monument or site, those that are extensive in terms of area (1/2 hectare or more) or length (1 kilometre or more), those that may impact the underwater environment (marine, intertidal/foreshore, riverine or lacustrine) and developments that require an Environmental Impact Statement. Archaeological heritage includes:</p> <ul style="list-style-type: none"> • National Monuments in the ownership or care of the State or Local Authority; it shall be noted that these will have Consent requirements and will need to be addressed directly with the National Monuments Service in this regard. • Archaeological and Architectural monuments/sites in the Record of Monuments and Places. • Monuments in the Register of Historic Monuments • Zones of Archaeological Potential in Historic Towns • Underwater Archaeological Heritage, including Historic Wrecks • Previously unknown and unrecorded archaeological sites (including subsurface elements with no visible surface remains and potential sites underwater in rivers, lakes or the sea, that can include wharves, jetties, quays, piers, fish traps, anchorages, bridges, fording points, rockcut steps or sea caves) • Potential sites located in the vicinity of large complexes of site or monuments • Present or former wetlands, unenclosed land, rivers or lakes, reclaimed areas, or the inter-tidal zone. 	<p>To provide an extensive baseline section, a Strategic Environmental Objective, indicators and targets to address these cultural heritage issues as relevant in the SEA Environmental Report. To provide extensive plan provisions providing for the appropriate management and protection of cultural heritage.</p>

3.3 Submissions on the Environmental Report for the Draft Plan

Various submissions were made on the Draft Plan, Proposed Material Alterations and/or associated environmental assessment documents while these documents were on public display.

Updates made on foot of submissions include:

- In the SEA Environmental Report, to add further detail to the compatibility criteria described at footnote no. 86 under Section 8.8 “Detailed Evaluation”.
- In the SEA Environmental Report, to clarify that the information is sourced on Table 4.4 is from EPA’s 2019 Annual Environmental Reports.4.4 “Note that as part of the Plan preparation process, a submission was received identifying periodic discharge of sewage at Tramore Pier. Measures have been integrated into the Plan as adopted related to water services, including those related to waste water.”
- In the SEA Environmental Report, to replace the reference to 47 County Geological Sites to 55 County Geological Sites, including two overview sites of the Copper Coast and Comeragh Mountains.

For further information on how submissions were considered, refer to the Chief Executive’s Report on submissions received on the Draft Plan and associated documents and the Chief Executive’s Report on submissions received on the Proposed Material Alterations and associated documentation – both available at <https://consult.waterfordcouncil.ie/>.

All parts of the Plan-preparation process were informed by the SEA, AA and SFRA processes - this includes the preparation of the Chief Executive’s Draft Plan, Members’ Amendments to that Plan in advance of public display, Proposed Material Alterations and Further Modifications. The mitigation integrated into the final, adopted Plan includes that identified in Section 9 of this report.

3.4 SEA documents including SEA Environmental Report

The Draft Plan and accompanying documents (including SEA Environmental Report and AA and SFRA documents) were placed on public display, having integrated various recommendations arising from the SEA, AA and SFRA processes. Responses to submissions made during the period of public display of a Draft Plan were integrated into a Chief Executive’s Report and considered by Waterford City and County Council.

A number of material alterations were proposed after public display of the Draft Plan. The Proposed Material Alterations were subject to Screening for SEA and AA and a selection of Alterations were subject to SEA and Stage 2 AA.

On adoption of the Plan, the Environmental Report that had been placed on public display alongside the Draft Plan was updated to become a final Environmental Report that is consistent with the adopted Plan, taking into account all changes that were made to the original Draft Plan that was placed on public display.

Section 4 Summary of Alternatives considered

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. Available reasonable alternatives for the City and County Development Plan are provided below.

4.2 Limitations in Available Alternatives

The Plan is required to be prepared by 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 limited by the provisions of higher-level planning objectives, including those of the National Planning Framework (NPF) and the Regional Spatial and Economic Strategy (RSES) for the Southern Region and associated Waterford Metropolitan Area Strategic Plan (MASP). These documents set out various requirements for the content of the Plan including on topics such as settlement typology, land use zoning and the sustainable development of rural areas.

4.3 Assessment of Alternatives for an Ecosystem⁴ Services Approach to the Plan

Alternative A: “A Plan that takes a more focused Ecosystems Services Approach” 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;
- 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.

Alternative B: “A Plan that does the basics but takes a less focused Ecosystems Services Approach” 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.

A less-interventionist approach to Ecosystems Services would provide less focus and attention to Ecosystem Services than would be the case under Alternative A and would not contribute towards achieving policy objectives of the RSES or NPF to the same degree as Alternative A.

⁴ 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 well-being

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 Alternative A.

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 Alternative: Alternative A.

4.4 Assessment of Alternatives for an infrastructure led approach to the Plan

In terms of infrastructure led approach to the plan, two alternatives can be considered:

- **Alternative A:** A Plan that takes a strict infrastructure led approach.

It is essential that development under the Plan is adequately served by infrastructure. An infrastructure led approach would support achieving the objectives of the NPF and RSES and associated Waterford MASP. An infrastructure led approach would provide a strategy for sustainable compact growth in all settlements, contribute to carbon reduction targets and achieve environmental enhancement and economic growth.

This alternative ensures that the sustainable development of settlements occurs, with new development accompanied by adequate and appropriate infrastructure.

This alternative would also facilitate the development of a concentric Waterford City, both north and south of the River Suir, and other key enablers for the MASP area.

This alternative would benefit the efficient provision of infrastructure and the environment (including water, human health, ecology and air/climate) the most and would provide the highest levels of certainty and coherence to both decision makers and stakeholders, including residents and potential developers. Applications for developments would be more likely to be successful, and residual adverse effects would be least likely. This approach would also contribute towards compliance with the objectives of the RSES and NPF.

- **Alternative B:** A Plan that does not takes a less strict infrastructure led approach.

This alternative considers existing and future demand and capacity in infrastructure but the allocation of growth and associated policy responses are looser than under Alternative A. Decisions relating to infrastructure assessment are left to project level wherever this is possible.

This alternative would benefit the efficient provision of infrastructure and the environment (including water, human health, ecology and air/climate) the least and would provide reduced levels of certainty and coherence to both decision makers and stakeholders, including residents and potential developers. Applications for developments would be less likely to be successful, and residual adverse effects would be more likely. Taking a less strict infrastructure led approach would not contribute towards achieving policy objectives of the RSES or NPF to the same degree as Alternative A.

Selected Alternative: Alternative A.

4.5 Assessment of Alternatives for Rural Waterford

(i) Rural Areas under Strong Urban Influence/Pressure

- **(i) Alternative A:** Designate Rural Areas under Strong Urban Influence/ Pressure

The methodology behind Alternative A, would build on the current policy framework set out in the Waterford County Development Plan 2011 – 2017, and would be consistent with the strategy and policy objectives of the NPF and RSES, and Section 28 Ministerial guidelines.

Alternative A provides for a robust and transparent policy approach to manage rural housing.

Restricting the development of single dwellings in rural areas that are under strong urban influence/pressure would positively impact upon the protection and management of the environment and sustainable development. The restrictions would help to both reduce levels of greenfield development in areas immediately surrounding existing centres and encourage brownfield development within existing centres.

Single dwellings in rural areas would be facilitated as appropriate and urban development would be directed towards established settlements. This alternative would help to prevent low density urban sprawl and associated adverse effects upon sustainable mobility, climate emission reduction targets and various environmental components.

- **(i) Alternative B:** Do not designate Rural Areas under Strong Urban Influence/Pressure and assess each planning application on its merits.

In terms of aligning the SEA, AA, SFRA and the Plan Policy Objectives, pursuing Alternative B would raise significant challenges in assessing the full impacts and effects of the alternative strategy approach on the environment, particularly water quality, biodiversity, loss of productive capacity, road capacity and carbon footprint. Furthermore, such an Alternative would be contrary to the NPF, RSES and Ministerial guidelines.

Alternative B Provides a vague and unclear policy approach to rural housing and risks facilitating a significant increase in urban-generated one-off housing in the open countryside which will undermine the role of small towns and villages and have consequences for the environment.

Not restricting the development of single dwellings in rural areas that are under strong urban influence/pressure would adversely impact upon the protection and management of the environment and sustainable development. The absence of restrictions would result in increased levels of greenfield development in areas immediately surrounding existing centres and less demand for brownfield development within existing centres.

Urban generated housing development would occur within rural areas outside of established settlements. This alternative would result in low density urban sprawl and associated adverse effects upon sustainable mobility, climate emission reduction targets and various environmental components.

It is considered that Alternative A is the most appropriate means of ensuring that a sustainable approach to rural housing need and demand can be met, in a manner that considers the requirements of communities, and those of the NPF and RSES.

Selected Alternative: Alternative A.

(ii) Villages/Clusters/Nodes and Serviced Sites

- **(ii) Alternative A:** Provide focus to and targeted policies/objectives for rural villages, clusters and nodes to act as a viable alternative to one-off housing in the open countryside.

Alternative A, by providing focus to and targeted policy objectives for the rural villages, clusters and nodes would facilitate a viable alternative to one-off housing in the open countryside. Development within these settlements would be more likely to be served by infrastructure (including water services infrastructure) and more likely to protect the environment including the status of ground and surface waters, water used for drinking water, human health, biodiversity and flora and fauna and the landscape. Development would be required to be subject to siting, design, protection of residential amenities and normal development management criteria, subject to the satisfactory provision of infrastructure and services and in keeping with the character of the settlement.

The identification of rural villages, clusters and nodes to facilitate a choice in providing for the housing and community needs of rural areas is an important element of supporting a choice and mix of housing within Waterford. This alternative would facilitate this by way of identifying such locations, and setting out development boundaries within which development may take place.

- **(ii) Alternative B:** Rural villages, clusters and nodes are included but there is no focus or no targeted provisions for these locations to act as a viable alternative to one-off housing in the open countryside

Alternative B, by not providing a focus to and targeted policy objectives for rural villages, clusters and nodes would be less likely to provide a viable alternative to one-off housing in the open countryside. Development within the open countryside would be less likely to be served by infrastructure (including water services infrastructure) and less likely to protect the environment including the status of ground and surface waters, water used for drinking water, human health, biodiversity and flora and fauna and the landscape. Alternative B would be the least sustainable of these two alternatives and would be most harmful to the environment.

Identifying areas within existing villages and nodes to support clustering of residential development across rural Waterford is an important element of providing choice in the housing market outside of urban settlements, in a manner consistent, in principle, with the NPF and RSES. Alternative A is therefore preferred.

Selected Alternative: Alternative A.

4.6 Assessment of Alternatives for Densities

Alternatives identified relating to densities comprise:

Alternative A: Application of a single standard residential density across all settlements.

The application of a low net singular residential density across the City and County would have the potential to push new development towards more environmentally sensitive lands that are less well-serviced and less well-connected, resulting in unnecessary potentially significant adverse effects on all environmental components.

The application of a singular high net residential density could result in a potential misalignment between the supply of zoned land to meet the projected demand for new housing. This could result in a misalignment between new development and essential services provision with associated potential for adverse effects on environmental components.

Alternative B: The Application of different densities at different locations, as appropriate, would provide for the most sustainable development, which would contribute towards environmental protection and management the most.

Higher densities would be provided where sustainable transport mode opportunities are available and lower densities would be provided where constraints are presented by, for example, wastewater and water infrastructure constraints, cultural heritage designations or the local road network. This approach would contribute towards national and regional strategic outcomes including the efficient use of land, compact growth and the transition towards a low carbon and more climate resilient society.

Alternative B would help to ensure compact, sustainable development within and adjacent to the existing built-up footprint and would conflict with the protection and management of environmental components the least. Alignment between new development and essential services provision would be most likely under Alternative B.

Taking cognisance of the range and diversity of settlements across the functional area of the development plan, and the settlement typology/ hierarchy, it is considered that Alternative B is the most sustainable option for delivering on the principles of compact growth, while facilitating placemaking, and the development of diverse rural areas a range of options for the housing market in terms of house type mix, tenure, design and cost, and delivering the Housing Strategy. Alternative B takes into account the objectives of the higher-level NPF and Southern RSES, and the need to comply with the densities set out in Ministerial Guidelines, including those related to *Sustainable Residential Development in Urban Areas (2009)* and *Urban Development and Building Heights (2018)*.

Selected Alternative: Alternative B.

4.7 Assessment of Alternatives for Land Use Zoning

Alternatives for Land Use Zoning are assessed on Table 4.1.

Table 4.1 Assessment of Alternatives against Strategic Environmental Objectives

Town	Alternative (selected alternatives in bold)	Commentary
Waterford City & Suburbs	Alternative A: More Compact	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the City and suburbs, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the City and suburbs and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Dungarvan/ Ballinroad	Alternative A: More Compact see note below	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact see note below	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise

Town	Alternative (selected alternatives in bold)	Commentary
Clonmel Environs	Alternative A: More Compact	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of Clonmel Environs, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the Clonmel Environs and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Tramore	Alternative A: More Compact see note below	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact see note below	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Dunmore East	Alternative A: More Compact	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Portlaoigh	Alternative A: More Compact	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.
Lismore	Alternative A: More Compact	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the settlement, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the settlement and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.

Town	Alternative (selected alternatives in bold)	Commentary
Gaeltacht na nDéise	Alternative A: More Compact	By consolidating land use zoning and reducing unnecessary land use zoning this alternative would provide for a more compact form of development that would help to maximise benefits from infrastructural investment. By consolidating the zoning and helping to avoid unnecessary sprawl of the Gaeltacht na nDéise, this alternative would increase the likelihood of brownfield development and contribute towards efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Reducing unnecessary zoning would help to minimise sprawl and would avoid potential adverse environmental effects that would otherwise occur - this would benefit the protection of multiple environmental components.
	Alternative B: Less Compact	By not consolidating land use zoning and including unnecessary land use zoning, this alternative would provide for a less compact form of development that would fail to maximise benefits from infrastructural investment. By facilitating the unnecessary sprawl of the Gaeltacht na nDéise and failing to consolidate zoning, this alternative would decrease the likelihood of brownfield development and conflict with efforts to improve sustainable mobility (with associated effects on energy, air, noise and human health). Providing for unnecessary zoning would be likely to result in higher levels of sprawl and associated avoidable potential adverse environmental effects.

4.8 Reasons for Selecting Chosen Alternatives

Selected alternatives for the Plan from each of the various types of alternatives that emerged from the planning/SEA process are indicated above.

These alternatives have been incorporated into the Plan having regard to both:

1. The environmental effects which are identified by the SEA and are detailed above; and
2. Planning - including social and economic - effects

Section 5 Monitoring Measures

5.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which will be used in order to monitor the likely significant effects of implementing the Plan.

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

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

5.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in the main SEA Environmental Report and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Given the position of the Development Plan in the land use planning hierarchy beneath RSES, the measures identified in the RSES SEAs, including the Southern RSES SEA, have been used – as they are or having been slightly modified – in most instances. This consistency across the hierarchy of land use plans will improve the efficiency and effectiveness of future monitoring.

Table 5.1 overleaf shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan, if unmitigated.

Monitoring is an ongoing process and the programme allows for flexibility and the further refinement of indicators and targets.

The Monitoring Programme may be updated to deal with specific environmental issues – including unforeseen effects – as they arise.

5.3 Sources

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

In implementing the Monitoring Programme the Council will take into account this hierarchy of planning and environmental monitoring.

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

5.4 Reporting and Responsibility

As provided by Policy Objective NH03 “Monitoring and Management”, the Council shall, in conjunction with the Regional Assembly and other sources as relevant, implement the monitoring programme as set out in the SEA Environmental Report and Statement. This will include the preparation of stand-alone SEA Monitoring Reports:

1. To accompany the report required of the manager under section 15(2) of the Act, including information in relation to progress on, and the results of, monitoring the significant environmental effects of implementation of the Development Plan; and

2. On the significant environmental effects of implementing the Plan, in advance of the beginning of the review of the next Plan.

Reporting will seek to address the indicators set out on Table 5.1. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports (reports will be made available to the public) and, if necessary, the carrying out of remedial action.

Table 5.1 Indicators, Targets, Sources and Remedial Action

Environmental Component	Indicators	Targets	Sources	Remedial Action
Biodiversity, Flora and Fauna	<ul style="list-style-type: none"> Condition of European sites 	<ul style="list-style-type: none"> 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, County Heritage Plan 2017-2022 	<ul style="list-style-type: none"> DHLGH report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years).⁵ DHLGH National Birds Directive Monitoring Report for the under Article 12 (every 3 years)⁶ Consultations with the NPWS⁷ 	<ul style="list-style-type: none"> Where condition of European sites is found to be deteriorating this will be investigated with the Regional Assembly and the DHLGH to establish if the pressures are related to Plan actions / activities. A tailored response will be developed in consultation with these stakeholders in such a circumstance.
	<ul style="list-style-type: none"> Number of spatial plans that have included ecosystem services content, mapping and policy to protect ecosystem services when their relevant plans are either revised or drafted 	<ul style="list-style-type: none"> Require all local level land use plans 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, County Heritage Plan 2017-2022 	<ul style="list-style-type: none"> Internal review of local land use plans 	<ul style="list-style-type: none"> Review internal systems
	<ul style="list-style-type: none"> SEAs and AAs as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Screen for and undertake SEA and AA as relevant for new Council policies, plans, programmes etc. 	<ul style="list-style-type: none"> Internal monitoring of preparation of local land use plans 	<ul style="list-style-type: none"> Review internal systems
	<ul style="list-style-type: none"> Status of water quality in the City and County's water bodies 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below 	<ul style="list-style-type: none"> Included under Water below
	<ul style="list-style-type: none"> Compliance of planning permissions with Plan measures providing for the protection of Biodiversity and flora and fauna – see Chapter 9 “Climate Action, Biodiversity and Environment” 	<ul style="list-style-type: none"> For planning permission to be only granted when applications demonstrate that they comply with all Plan measures providing for the protection of biodiversity and flora and fauna – see Chapter 9 “Climate Action, Biodiversity and Environment” 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Population and Human Health	<ul style="list-style-type: none"> Implementation of Plan measures relating to the promotion of economic growth as provided for by Chapter 4 “Economy, Tourism, Education and Retail” 	<ul style="list-style-type: none"> 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 Chapter 4 “Economy, Tourism, Education and Retail” By 2020 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) 	<ul style="list-style-type: none"> Internal review of progress on implementing Plan objectives Consultations with DECC 	<ul style="list-style-type: none"> Review internal systems Consultations with DECC
	<ul style="list-style-type: none"> Number of spatial concentrations of health problems arising from environmental factors resulting from development permitted under the Plan 	<ul style="list-style-type: none"> No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA 	<ul style="list-style-type: none"> Consultations with the Health Service Executive and EPA
	<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Waterford City and County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
	<ul style="list-style-type: none"> Number of spatial plans that include specific green infrastructure mapping 	<ul style="list-style-type: none"> Require all local level land use plans to include specific green infrastructure mapping 	<ul style="list-style-type: none"> Internal review of local land use plans 	<ul style="list-style-type: none"> Review internal systems

⁵ Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

⁶ Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

⁷ Including confirmation with development management that the following impacts have been considered and including use of monitoring data, where available: biodiversity/habitat loss; nitrogen deposition impacts on Natura 2000 sites; recreational disturbance resulting from implementation of tourism and recreation policies and objectives particularly in riparian areas; biodiversity enhancement; and disturbance /visitor pressure impacts of recreation, amenity and tourism development.

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Environmental Component	Indicators	Targets	Sources	Remedial Action
Soil (and Land)	<ul style="list-style-type: none"> Proportion of population growth occurring on infill and brownfield lands compared to greenfield (also relevant to Material Assets) 	<ul style="list-style-type: none"> Maintain built surface cover nationally to below the EU average of 4% 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 across the City and County 	<ul style="list-style-type: none"> EPA Geoportal Compilation of greenfield and brownfield development for the DHLGH AA/Screening for AA for each application 	<ul style="list-style-type: none"> Where the proportion of growth on infill and brownfield sites is not keeping pace with the targets set in the NPF and the RSES, the Council will liaise with the Regional Assembly to establish reasons and coordinate actions to address constraints to doing so.
	<ul style="list-style-type: none"> Instances where contaminated material generated from brownfield and infill must be disposed of 	<ul style="list-style-type: none"> Dispose of contaminated material in compliance with EPA guidance and waste management requirements 	<ul style="list-style-type: none"> Internal review of grants of permission where contaminated material must be disposed of 	<ul style="list-style-type: none"> Consultations with the EPA and Development Management
	<ul style="list-style-type: none"> Environmental assessments and AAs as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Screen for and undertake environmental assessments and AA as relevant for applications for brownfield and infill development prior to planning permission 	<ul style="list-style-type: none"> Internal monitoring of grants of permission 	<ul style="list-style-type: none"> Review internal systems
Water	<ul style="list-style-type: none"> Status of water bodies as reported by the EPA Water Monitoring Programme for the WFD 	<ul style="list-style-type: none"> Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' Implementation of the objectives of the River Basin Management Plan 	<ul style="list-style-type: none"> EPA Monitoring Programme for WFD compliance 	<ul style="list-style-type: none"> Where water bodies are failing to meet at least good status this will be investigated with the DHLGH Water Section, the EPA Catchment Unit, the Regional Assembly and, as relevant, Irish Water 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 Irish Water to achieve the necessary capacity.
	<ul style="list-style-type: none"> Number of incompatible developments permitted within flood risk areas 	<ul style="list-style-type: none"> Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Where planning applications are being permitted on flood zones, the Council will ensure that such grants are in compliance with the Flood Risk Management Guidelines and include appropriate flood risk mitigation and management measures.
Material Assets	<ul style="list-style-type: none"> Programmed delivery of Irish Water infrastructure for all key growth towns in line with Irish Water Investment Plan and prioritisation programme to ensure sustainable growth can be accommodated Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan 	<ul style="list-style-type: none"> All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan Where septic tanks are proposed, for planning permission to be only granted when applications demonstrate that the outfall from the septic tank will not - in- combination with other septic tanks- contribute towards any surface or ground water body not meeting the objective of good status under the Water Framework Directive Facilitate, as appropriate, Irish Water 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 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission Consultations with the Irish Water DHLGH in conjunction with Local Authorities 	<ul style="list-style-type: none"> 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 Irish Water to achieve the necessary capacity.
	<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Waterford City and County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.

SEA Statement for the Waterford City and County Development Plan 2022-2028

Environmental Component	Indicators	Targets	Sources	Remedial Action
Air	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels of 74% NO_x, SO_x, PM10 and PM2.5 as part of Ambient Air Quality Monitoring 	<ul style="list-style-type: none"> Decrease in proportion of journeys made by private fossil fuel-based car compared to 2016 National Travel Survey levels Improvement in Air Quality trends, particularly in relation to transport related emissions of NO_x and particulate matter 	<ul style="list-style-type: none"> CSO data Data from the National Travel Survey EPA Air Quality Monitoring Consultations with Department of Transport and Department of Environment, Climate and Communications 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 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	<ul style="list-style-type: none"> Implementation of Plan measures relating to climate reduction targets 	<ul style="list-style-type: none"> For review of progress on implementing Plan objectives to demonstrate successful implementation of measures relating to climate reduction targets 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Review internal systems
	<ul style="list-style-type: none"> A competitive, low-carbon, climate-resilient and environmentally sustainable economy 	<ul style="list-style-type: none"> Contribute towards transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050 	<ul style="list-style-type: none"> Monitoring of Waterford City and County Council's Climate Change Adaptation Strategy 2019-2024 EPA Annual National Greenhouse Gas Emissions Inventory reporting Climate Action Regional Office Consultations with DECC 	<ul style="list-style-type: none"> Where targets are not achieved, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.
	<ul style="list-style-type: none"> Share of renewable energy in transport 	<ul style="list-style-type: none"> Contribute towards the target of the Renewable Energy Directive (2009/28/EC), for all Member States to reach a 10% share of renewable energy in transport by facilitating the development of electricity charging and transmission infrastructure, in compliance with the provisions of the Plan 		
	<ul style="list-style-type: none"> Carbon dioxide (CO₂) emissions across the electricity generation, built environment and transport sectors 	<ul style="list-style-type: none"> Contribute towards the target of aggregate reduction in carbon dioxide (CO₂) emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors 		
	<ul style="list-style-type: none"> Energy consumption, the uptake of renewable options and solid fuels for residential heating 	<ul style="list-style-type: none"> To promote reduced energy consumption and support the uptake of renewable options and a move away from solid fuels for residential heating 		
	<ul style="list-style-type: none"> Proportion of journeys made by private fossil fuel-based car compared to 2016 levels 	<ul style="list-style-type: none"> Decrease in the proportion of journeys made by residents of the City and County using private fossil fuel-based car compared to 2016 levels 	<ul style="list-style-type: none"> CSO data Monitoring of Waterford City and County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where trends toward carbon reduction are not recorded, the Council will liaise with the Regional Assembly and the Eastern and Midlands Climate Action Regional Office to establish reasons and develop solutions.
	<ul style="list-style-type: none"> Proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> Increase in the proportion of people reporting regular cycling / walking to school and work above 2016 CSO figures 	<ul style="list-style-type: none"> CSO data Monitoring of Waterford City and County Council's Climate Change Adaptation Strategy 2019-2024 	<ul style="list-style-type: none"> Where proportion of population shows increase in private car use above CSO 2016 figures, the Council will coordinate with the Regional Assembly, the DHLGH, DECC and NTA to develop a tailored response.
Cultural Heritage	<ul style="list-style-type: none"> Percentage of entries to the Record of Monuments and Places, and the context these entries within the surrounding landscape where relevant, protected from adverse effects resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Monuments and Places, and the context of these entries within the surrounding landscape where relevant, from adverse effects resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Where monitoring reveals visitor pressure is causing negative effects on key tourist features along these routes, the Council will work with Regional Assembly, Fáilte Ireland and other stakeholders to address the pressures through additional mitigation tailored to the plans.
	<ul style="list-style-type: none"> Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan 	<ul style="list-style-type: none"> Consultation with DHLGH 	
Landscape	<ul style="list-style-type: none"> Number of developments permitted that result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> No developments permitted which result in avoidable adverse visual impacts on the landscape, especially with regard to landscape and amenity designations included in Land Use Plans, resulting from development which is granted permission under the Plan 	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission 	<ul style="list-style-type: none"> Where monitoring reveals developments permitted which result in avoidable adverse visual impacts on the landscape, the Council will re-examine Plan provisions and the effectiveness of their implementation