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PLANNING

WATERFORD CITY AND COUNTY COUNCIL CLIMATE ACTION PLAN 2024 - 2029

SEA Environmental Report

Prepared for:
Waterford City and County Council



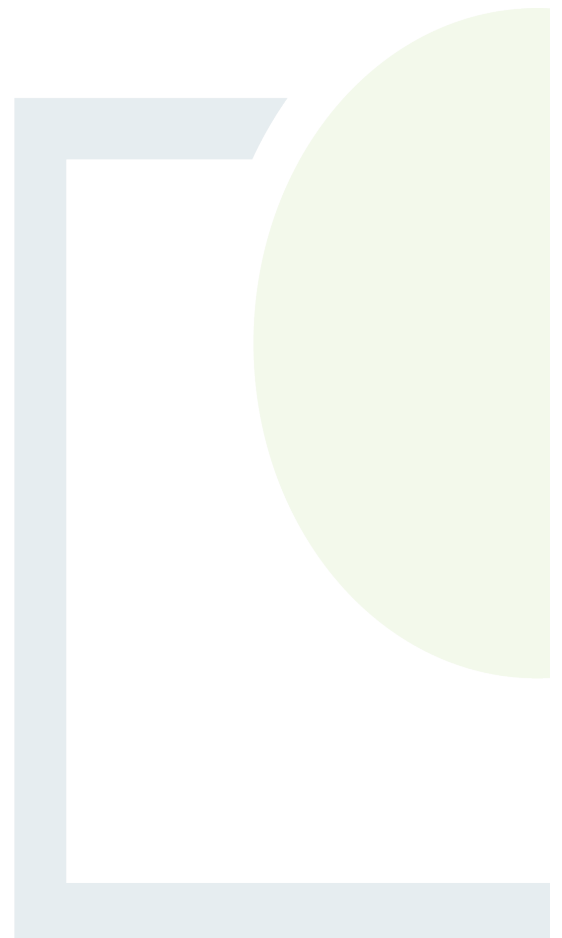
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SEA Environmental Report for the Waterford City and County Council Climate Action Plan

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Abstract: Fehily Timoney and Company is pleased to submit this SEA Environmental Report for the LACAP 2024-2029 to Waterford City and County Council.

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NON-TECHNICAL SUMMARY

Introduction

This is the Non-Technical Summary of the environmental report for the Strategic Environmental Assessment (SEA) of the Waterford City and County Council (WCCC) Local Authority Climate Action Plan (herein referred to as the 'Plan' or 'LACAP') 2024-2029 for the Waterford functional area. The purpose of this SEA was to identify and evaluate the likely significant environmental effects of implementation of the LACAP.

Background

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 (herein referred to as the 'Climate Act') sets out the provisions governing the establishment and operation of a LACAP. The broad purpose of a LACAP is to define adaptation and mitigation measures at local level to support the reduction of Greenhouse Gas (GHG) emissions within a local authority as an organisation and throughout the local community. LACAPs shall be implemented over a five-year period. Given the scale and nature of the LACAP, environmental effects were likely, and therefore SEA was required to be undertaken on the LACAP.

Approach to SEA

The SEA process can be defined by four stages, all of which include some level of consultation with stakeholders and the public. These stages are defined as:

- Stage 1 – Screening: deciding whether an SEA is required, or not.
- Stage 2 – Scoping: establishing the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts.
- Stage 3 – Identification, Prediction, Considerations of Alternatives, Evaluation and Mitigation of Potential Impacts.
- Stage 4 – Consultation, Revision and Post-Adoption. This includes the implementation of statutory SEA monitoring.

The SEA process ran in parallel with the Appropriate Assessment (AA) process, which is an assessment process focusing on the potential effects of a plan or project on sites designated for nature protection known as 'European Sites.'

The LACAP

The WCCC LACAP is an action plan which defines local level climate adaptation and mitigation measures to support the reduction of GHG emissions within the local authority as an organisation and throughout the local community in the local authority's functional area.

The LACAP have an inward and outward focus. Climate action in the LACAP has been defined by local authorities for their own organisation which they have full control over (i.e., the inward focus), and for communities in their functional area, which they exert a strong influence over in partnership with relevant stakeholders (i.e., the outward focus).



The plan period for the LACAP is from 2024 to 2029. The Council must review and update the LACAP after a period of 5 years.

The LACAP has been developed in accordance with the requirements of Section 16 of the Climate Act. It is consistent with the Climate Action Plan 2023 (CAP23) and the National Adaptation Framework. Local authority Development Plans are also aligned with their LACAP.

The overall vision of the LACAP is to deliver effective climate mitigation and adaptation at local level in support of the broader societal goal of achieving climate resilience and climate neutrality.

Through the development and implementation of specific, action-focused, time-bound and measurable actions, the LACAP will achieve the following strategic outcomes (as defined by the Department of the Environment, Climate and Communications Guidelines for Local Authority Climate Action Plans):

1. Provide a strong emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level, while addressing context-specific conditions and support for locally tailored policy making.
2. Deliver and promote evidence-based and integrated climate action by way of adaptation and mitigation measures, centred around a strong understanding of the role and remit of the local authority on climate action.
3. Translate and provide strategic direction at local and community levels on the delivery of the national climate objective which is seeking to curb further global warming and to transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy by no later than the end of 2050.

The Environmental Baseline

An evaluation and a characterisation of the current state of the environment likely to be affected by the LACAP has been undertaken to inform the SEA process.

The following Environmental Components were considered during this evaluation:

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeology & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change



A non-technical and high-level summary of the baseline environment is provided in the table below. This table presents key, salient facts regarding the baseline environment of the local authority functional area the LACAP applies to.

Environmental Component	Summary of the Baseline Environmental Characteristics
Population and Human Health	<ul style="list-style-type: none"> In the 2022 Census, the total population of Waterford was 127,363 persons, showing the trend of an increase in total population in the County by ca. 9.6% (11,187 persons) since the previous Census. Southern Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019-2031 has listed the 2031 transitional population projection for Waterford as being 21,000-28,000 persons
Biodiversity, Flora & Fauna	<ul style="list-style-type: none"> There is one UNESCO Global Geopark in Waterford, the Copper Coast UNESCO Global Geopark. There are 9 designated SACs within, partially within or adjacent to the County, including: Ardmore Head (002121); Blackwater River (Cork/Waterford) (002170); Comeragh Mountains (001952); Glendine Wood (002324); Helvick Head (000665); Lower River Suir (002137); Nier Valley Woodlands (000668); River Barrow and River Nore (002162); and Tramore Dunes and Backstrand (000671). There are 6 designated SPAs within, partially within or adjacent to the County, including: Poulaphouca Reservoir SPA (004063). There is one designated Ramsar site adjacent to the County boundary; Pollardstown Fen. There are 2 designated NHAs within, partially within or adjacent to the County including: Blackwater and Callows (004094); Blackwater Estuary (004032); Dungarvan Harbour (004032); Helvick Head to Ballyquin (004192); Mid-Waterford Coast (004193); and Tramore Back Strand (004027). There are three Ramsar sites designated within the County: Blackwater Estuary (in the south-west of the County); Dungarvan Harbour (in the south of the County); and Tramore Backstrand (in the east of the County). There are 31 pNHAs within or partially within the County, including: Belle Lake (000659); Waterford Harbour (000787); Glencairn (002095); Ballin Lough (001691); and Kilbarry Bog (001700). There are 15 locations in Waterford with a number of species protected by the Order, including: Tallowbridge (<i>Orthotrichum sprucei</i>); Ballynerroon East (<i>Orthotrichum sprucei</i>); Knocklofty Bridge (<i>Leptodon smithii</i>); Dromore-Lismore (<i>Orthotrichum sprucei</i>); Dungarvan (<i>Scleropodium touretii</i>); Deelish (<i>Fissidens rufulus</i>); Coumtay (<i>Hamatocaulis vernicosus</i>); Coumfea (<i>Barbilophozia atlantica</i>); Sgilloge Loughs (<i>Hamatocaulis vernicosus</i>). There are two Wildfowl Sanctuaries within or partially within the County: Coolfin Marshes (WFS-50); and River Blackwater (WFS-51). Sections of the Rivers Blackwater and Bride are listed under the Salmonid Waters Regulations.



Environmental Component	Summary of the Baseline Environmental Characteristics
	<ul style="list-style-type: none"> There is one OSPAR Site designated adjacent to the Plan area: Tramore Dunes and Backstrand MPA (O-IE-0002974).
Landscape & Visual Amenity	<ul style="list-style-type: none"> Waterford has a very diverse landscape including uplands, waterway corridors, demesne and coastal landscapes. Mountain regions, including the Comeragh Mountains, are found mainly in the north-west and centre of the County, and several south-flowing river systems, including the Suir, the Blackwater and the Bride, and a rugged coastline with many coves and beaches in the east and south-east of the County. The east of the County is low lying and has a concentration of lakes and wetlands. The Landscape Character Assessment divides the County into 7 Landscape Character Types.
Cultural Heritage - Archaeology & Architectural	<ul style="list-style-type: none"> There are hundreds of Recorded Monuments within the County. These monuments are found throughout the County concentrated within and adjacent to the existing built-up footprint of the County and in the rural areas. Graveyards, castles, forts, crosses and churches are amongst the most common recorded monuments. There are close to 3,000 entries to the Record of Protected Structures within the County
Soils	<ul style="list-style-type: none"> Dominant soil types in the county include: Brown Earths and Brown Podzolics. Other soil types in the county include Peat, Alluvial soils, Luvisols and Urban soils.
Land Use	<ul style="list-style-type: none"> Land use mapping for Waterford is shown in Figure 4-9 of the main body of the report. This mapping shows the extent of all land use present in the county (e.g., urban fabric, agricultural land use, forest, etc.)
Air Quality & Noise	<ul style="list-style-type: none"> The Air Quality in Ireland 2021 report prepared by the EPA identifies that: Air quality in Ireland is generally good, however, there are concerning localised issues that are negatively impacting the air we breathe. Air quality monitoring results in 2021 show that fine particulate matter (PM2.5) mainly from burning solid fuels in our homes, and nitrogen dioxide (NO2) mainly from road transport, remain the main threats to good air quality. EPA monitoring shows that fine particulate matter (PM2.5) and nitrogen dioxide (NO2) levels are within the current EU legal limits, however these pollutants exceed the World Health Organization (WHO) (2021) guidelines.
Water	<ul style="list-style-type: none"> There are many rivers and lakes in the County, as well as the coastline along the southeast of the County. The County is located mainly within the Colligan-Mahon, Blackwater and the Suir catchments. The WFD groundwater status (2016-2021) underlying Waterford is generally identified as being of Good status.



Environmental Component	Summary of the Baseline Environmental Characteristics
	<ul style="list-style-type: none"> The WFD status of rivers and streams (2016-2021) draining Waterford ranges from high (sections of rivers and streams, including; the Tay; the Dalligan; the Araglin; the Glasha; and the Mahon), to good (sections of rivers and streams, including; the Darrigal; Licky; Nier; and Clodiagh), to moderate (sections of rivers and streams including; the Suir; Mahon; Finisk; and Ballymoat) and to poor (sections of rivers and streams including; Dawn; St. Johns; Halfway House Stream; and Brickey).
Material Assets	<ul style="list-style-type: none"> Waterford is traversed by three major roads networks – N24, N25 and N72. The County is served by Irish Rail, Bus Éireann and a number of private buses. The existing Green Infrastructure in County boasts many key features and activities across the urban, rural and upland areas. Many of these are iconic in nature, including the numerous rivers, streams, coastline, parks and open spaces of County and regional significance.
Tourism & Recreation	<ul style="list-style-type: none"> Tourism and recreation are influenced by a range of factors in Ireland. International tourism has increased in recent years. Failte Ireland has recently published their four brand strategies which will define the spatial scope and spread of future tourism developments within Ireland. Waterford hosts 'Ireland's Ancient East'. At county level, Waterford County Council has developed the Waterford Tourism Strategy & Work Plan 2017–2022. Cultural Heritage sites also support heritage-related tourism and recreation.
Climate Change	<ul style="list-style-type: none"> Waterford is affected by climate change policy and issues broadly. The recent Climate Action and Low Carbon Development (Amendment) Act 2021 was established to provide for the approval of plans by the Government in relation to climate change. This aims at pursuing the transition to a climate resilient, biodiversity rich and climate neutral economy by no later than the end of the year 2050. Ireland's Climate Action Plan 2023 sets out Ireland's national and sectoral targets in this regard. Future changes in climate and associated impacts on sea level, rainfall patterns/intensity and river flow will influence flooding frequency and extent in the future. Local Authorities in compliance with the Regional Planning Guidelines are attempting to adopt sustainable flood risk strategies in areas likely to be at risk of flooding in the future in the context of climate change and changing weather patterns. Changes to climate could lead to an increase in flooding events in Ireland.

A brief and non-technical summary of the key issues and potential associated with the environmental baseline relevant to the LACAP has been provided below.

Section 4 of the main body of the SEA Environmental Report contains further detail on baseline environmental characteristics, including a variety of details environmental mapping, for those who wish to develop a more in-depth understanding of the environmental baseline.



Population and Human Health – Key Issues relating to the LACAP

- Recreational and development pressure on habitats and landscapes.
- Population and development growth will potentially influence the energy requirement within the county.
- Population and development growth will potentially influence the decarbonising zone.
- Potential visual effect of green infrastructure development

Biodiversity, Flora and Fauna – Key Issues relating to the LACAP

- Route selection and classification criteria are a key consideration in the development of blueways (i.e., active travel schemes that may align with rivers or streams) and greenways within the LACAP due to the largely linear nature of these developments.
- The potential for effects on non-designated biodiversity features e.g., important habitats and species outside designated sites - particularly with regard to fragmentation, barriers to movement and displacement.
- The potential for effects on protected areas: National and European sites (e.g., SAC, SPAs, RAMSAR), National sites (e.g. NHAs) and other Natural Heritage Sites and Conservation Interest Sites e.g. refuge for fauna or flora, wildfowl reserves.
- The potential to spread invasive species.
- The potential for biodiversity enhancement.

Landscape, Seascape & Visual Amenity – Key Issues relating to the LACAP

- Effects of green infrastructure (i.e., blueways, greenways) and renewable energy farm developments on areas of designated landscape quality and scenic views etc.
- Sensitivity of the landscape to change from green infrastructure development.

Cultural Heritage – Key Issues relating to the LACAP

- The potential impact of the development of energy projects and green infrastructure on archaeological and architectural heritage.
- No existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

Soils – Key Issues relating to the LACAP

- Potential for impacts on soil resources and offshore sediment transport.
- Potential impacts to soils (land) vulnerable to erosion.
- Potential for unearthing contaminated material.



Land Use – Key Issues relating to the LACAP

- Potential constraints on commercial activities, both during construction and operation of renewable energy infrastructure projects associated with the LACAP.
- Potential constraints on other sectors such as agricultural, forestry and fisheries, primarily related to construction and operation of infrastructure projects (i.e., solar farms, blueways) associated with the LACAP.

Air Quality and Noise – Key Issues relating to the LACAP

- Blueway developments, particularly during the construction phase, may have a temporary negative impact on air quality and create noise pollution.
- Renewable energy developments may have impacts on noise pollution, particularly towards sensitive receptors which are in close proximity.

Water – Key Issues relating to the LACAP

- Potential pressures and impacts on water body status from the construction of renewable energy and blueway projects i.e., increased sedimentation, groundwater recharge and accidental spillages.

Material Assets – Key Issues relating to the LACAP

- Disruptions to existing transport infrastructure through the development of alternative options such as active travel routes could occur.
- Demands for increased renewable infrastructure and associated connection networks.
- Effects on sensitive receptors with increased demands for active travel/green/renewable infrastructure, in particular during the construction phase.
- The potential for effects on existing green and blue infrastructure and key ecological corridors from inappropriate development.

Tourism and Recreation – Key Issues relating to the LACAP

- Green infrastructure development may have the potential to restrict or reduce the quality of resources important for recreation and/or tourism including angling facilities, boating activities and/or associated resources.
- The promotion or development of blueways and greenways could add additional loading pressures in terms of visitor interactions at sensitive areas such as trampling, disturbance, erosion, littering etc.

Climate Change – Key Issues relating to the LACAP

- The LACAP will contribute to the targets, set out in the Climate Action Plan 2023.



- The potential impact of changes in climate including flooding and temperature increases should be factored into the LACAP.

Evolution of the Baseline Environment

The SEA Directive requires that consideration is given to the likely evolution of the baseline environment in the event the LACAP is not progressed and implemented. In the event the LACAP was not implemented; the baseline environment would primarily evolve in line plans and policies currently being implemented (e.g., the Development Plan for the local authority functional area).

Not progressing the specific set of climate mitigation and adaptation related actions defined in the LACAP would present several significant lost opportunities. A variety of likely positive environmental effects associated with LACAP implementation would not come to fruition. A number of potential adverse effects associated with the existing baseline scenario are more likely to occur.

None of the specific climate related adaptation or flood resilience actions defined in the LACAP would be implemented. Climate change related risks relating to severe weather events (including storms and heatwaves) are less likely to be fully understood and controlled at local level as a consequence.

The variety of nature based solutions proposed in the LACAP would not be implemented. The GHG emission sequestration potential associated with actions promoting the enhancement of ecological sites and greenspace would not be realized.

The biodiversity related protection measures defined in the LACAP would not be implemented, making it less likely that the risk to biodiversity and protected sites, habitats and species due to climate change factors will be adequately managed and controlled at local level.

The active travel/sustainable transport related actions in the LACAP would not be implemented. The expansion of the EV network in the County will have less express policy support. Promoting a modal shift from private car use to the use of sustainable modes of transport will have less express, community level policy support.

Strategic Environmental Objectives

The SEA Directive states that an SEA should also look at *'the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.'* The identification of environmental protection objectives relevant to a plan provide the basis for evaluating the significance of impacts during the SEA process. All environmental protection objectives relevant to the LACAP have been identified.

Strategic Environmental Objectives (SEOs) are methodological measures which facilitate the development of targets against which the environmental effects of the LACAP can be tested. SEOs are based on wider environmental protection objectives on local, regional, national, European and international level that are relevant to WCCC's LACAP. They are high-level in nature and set strategic goals for improvement.



All SEOs applicable to the LACAP are presented in the table below:

Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species. ¹
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.
	B4	To avoid or minimize significant impacts on semi-natural habitats, species, environmental features, or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation; and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.
Landscape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.
	AQN3	Avoid or minimise adverse noise impacts.
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.

¹ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.



Environmental Component	SEO Code	Strategic Environmental Objective
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.
	W5	Prevent impact upon drinking water quality.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.
	MAI3	Promote sustainable transportation.
	MAI4	Promote sustainable waste management.
	MAI5	Promote sustainable water use and drainage management.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change

Description and Evaluation of LACAP Alternatives

The SEA Directive requires that reasonable alternative means of achieving the strategic goals of the LACAP (taking into account the objectives and the geographical scope of a plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Such reasonable alternatives must be realistic and capable of implementation. Reasonable alternatives were assessed against the Strategic Environmental Objectives (SEOs) established for the aspects of the baseline environment which are likely to be significantly affected by the LACAP.

The underpinning goal of the reasonable alternative evaluation process was to ensure that the selection of preferred alternatives by the Local Authority is informed by environmental considerations.

The following reasonable alternatives to the LACAP were identified:

- Alternative 1 - The Pareto Approach: Prioritise reducing GHG emissions from largest GHG emitting sectors to mitigate against climate change impacts.
- Alternative 2 - The Holistic Approach: Adopt a multi-pronged approach and focus on a range of priority areas to mitigate against and adapt to climate change impacts.
- Alternative 3 - The Holistic and Participatory Approach (Current LACAP): Adopt a multi-pronged approach - that has a strong community engagement emphasis - and focus on a range of priority areas to mitigate against and adapt to climate change impacts.



An evaluation of the potential effects of the reasonable alternatives on the baseline environment was carried out in accordance with the SEA Directive and best practice guidelines. A summary of this evaluation is presented below:

- Alternative 1 - The Pareto Approach - will lead to some positive environmental effects and will result in the reduction of GHG emissions in the sectors that the local authority can control or exert substantial influence on that contribute most in terms of GHG emission in the County - the Residential and Transport sectors. It is less likely that this alternative will deliver the wide-ranging climate mitigation and offsetting related action required to fully realise GHG emission reduction potential in the County. It is also less likely this alternative would define a wide range of climate adaptation measures that would fully protect biodiversity, heritage resources, environmental receptors and people from climate change risks. This alternative approach may generate several negative environmental effects, which would not be counterbalanced by the positive environmental effects associated with Alternatives 2 and 3.
- Alternative 2 - The Holistic Approach - and Alternative 3 - The Holistic and Participatory Approach - will both broadly deliver suitably wide ranging and effective climate action. These alternatives have the potential to generate multiple positive environmental effects, including a reduction in GHG emissions at organisational, community and sectoral levels, in addition to a variety of other environmental benefits. These alternatives will place a balanced emphasis on both climate mitigation and adaptation action, ensuring climate change related environmental risks are adequately understood and managed at community level.
- Alternative 3 has the best potential to deliver effective climate action given its holistic, wide encompassing nature; and given its strong community engagement emphasis, which supports better participation in climate action at community level. Alternative 3 has better potential there to fully realise potential environmental effects than Alternative 2.

Reasonable Alternative 3 - The Holistic and Participatory Approach - therefore constituted the preferred alternative or preferred plan.

Evaluation of the Environmental Effects of LACAP Implementation

A detailed evaluation of the potential effects of the Preferred LACAP on the baseline environment was carried out in accordance with the SEA Directive and best practice guidelines. A concise and non-technical summary of the key environmental effects associated with LACAP implementation is presented below:

- The variety of climate actions defined in the LACAP, including organisational and community-based actions are likely to positively affect the climate environment.
- The LACAP is broadly supportive of different forms of community and local area based renewable energy development, which will have a positive effect on the climate environment.
- In the absence of appropriate mitigation, community and local area renewable energy development that might be supported by LACAP actions, including any associated ancillary and linear infrastructure, has the potential to have a variety of unintended negative environmental effects, including effects on local human receptors, biodiversity, landscape character and visual amenity, and the receiving noise environment.
- The LACAP supports the increased use of light-emitting diode (LED) lighting potentially across a wide geographic area. In absence of appropriate mitigation, the wide use of such lighting may lead to adverse effects on sensitive nocturnal species.



- Several LACAP actions are supportive of the upgrading/retrofitting of buildings to improve energy performance. In the absence of appropriate mitigation, such actions may negatively affect the status of protected structures.
- The LACAP supports the carrying out of a range of flood relief and resilience action that will have a positive environmental effect on water quality, hydrology and biodiversity. The delivery of this action has the potential to reduce flood risk and prevent flood events.
- The carrying out of the range flood relief and resilience action contained in the LACAP has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on water and biodiversity environments.
- The LACAP supports the carrying out of a variety of coastal protection related action, including action intended on mitigating coastal flood or erosion risk. These range of actions have the potential to have positive effects on biodiversity, water quality and the soils environment.
- The carrying out of coastal protection related action contained in the LACAP has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on the water or biodiversity environment.
- LACAP actions support better resource management and the circular economy at organisational, community and local area level, which can potentially lead to improvement resource efficiency and reduced lifecycle GHG emissions associated with material production.
- The inappropriate or improper implementation of waste management related action could have unintended, negative environmental and nuisance related effects.
- The LACAP supports the development of community and local area level nature-based solutions - in response to climate related risk - which are supportive of biodiversity protection and enhancement.
- The LACAP supports green infrastructure development broadly. In absence of appropriate design and mitigation, the development of green infrastructure that is of a significant scale or extent could potentially result in negative environmental effects, including negative construction related effects, negative effects on biodiversity or negative effects on cultural heritage assets.
- The LACAP defines a variety of climate adaptation related actions designed to protect human receptors, biodiversity and heritage assets from the impacts of climate change influenced events such as flooding. The implementation of this action has the potential to generate positive effects for these environmental receptors - by reducing the risk of such events impinging on or damaging these receptors.
- LACAP actions support the development, expansion and management of safe active travel networks. The delivery of an expanded safe active travel network has the potential to promote the use of sustainable and active travel modes in the community, encourage modal shift, reduce traffic related risks and support the reduction of vehicle related emissions.
- LACAP actions support the development, expansion and management of safe active travel networks. In the absence of appropriate design and mitigation, the development of active travel networks can negatively impact on the receiving human, noise, air, water, soils, biodiversity, cultural heritage or existing traffic and transport environments.
- LACAP actions support the expansion of the Electric Vehicle (EV) charging network and active travel parking in the local authority functional area. The successful delivery of this action has the potential to underpin the use of EV vehicles and active travel modes at community and local area level and support the reduction of vehicle related emissions, thereby positively impacting on local air quality, the climate and population and human health.



- LACAP actions support the expansion of EV charging network and active travel parking across the breadth of the local authority functional area. In the absence of appropriate mitigation, the construction of additional charging point infrastructure can negatively impact on the receiving human, noise, air, water, soils, biodiversity, cultural heritage, material asset or existing traffic and transport environments.

Mitigation Measures

Overview of Mitigation Measures

Potential negative environmental effects that may occur as a result of the implementation of the LACAP (without considering any mitigation) were identified.

The SEA Directive requires that mitigation measures to prevent, reduce and as fully as possible offset any potential significant negative environmental effects due to the implementation of a plan are defined.

Following the evaluation of environmental effects of LACAP implementation, the following forms of mitigation were adopted to ameliorate the negative environments of the LACAP:

- Mitigation through consideration of alternatives.
- Mitigation through integration of environmental considerations into the LACAP.
- Mitigation through consideration of development management standards/environmental protection objectives contained in the CDP.

Environmental considerations were appropriately taken into account during the LACAP making process and when considering LACAP alternatives. The preferred LACAP has been chosen on the basis that it will generate the maximum level of positive climate and environmental co-benefit related effects, and the minimum level of negative environmental effects.

The LACAP making process was carried out in parallel with the SEA and AA processes. Regular communication and interaction took place between the environmental assessment team and the plan making team. Environmental considerations that came to light during the SEA and AA processes, including consultation processes, were regularly communicated to the plan making team during the plan making process. As necessary, environmental mitigation measures to ameliorate the potential negative environmental effects of implementing the LACAP were developed and then integrated into the LACAP. Much of the environmental mitigation was embedded in the LACAP early on in the process as a result of this. This process was carried out in an iterative manner to ensure optimal plan making and environmental outcomes. Environmental considerations were also integrated into the LACAP so as to facilitate maximising identified positive environmental effects of the LACAP.

Mitigation measures were proposed that maximise the co-benefits of climate action for other environmental components such local air quality, human health, biodiversity, water quality and other interrelated areas (i.e., win-win solutions).

Additional text clarifying environmental protection related obligations and environmental enhancement opportunities has been attached to a variety of defined actions in the LACAP. This text has been shaped to ensure that environmental considerations are appropriately taken into account during LACAP implementation. This text has also been shaped to ensure LACAP implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects.



Several environmental governance principles were established to ensure LACAP implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects. These environmental governance principles shall underpin and guide LACAP implementation and shall apply to and be integrated into all actions/activities which result due to the implementation of the LACAP.

In addition to the environmental mitigation measures integrated into the LACAP, the development management standards and environmental protection measures defined in the CDP will serve to mitigate the environmental effects of any development proposals supported by the LACAP. These development management standards/environmental protection measures have been defined for the express purpose of ensuring proper planning and sustainable development in the local authority functional area. The CDP has been subject to its own SEA and AA. The LACAP has been prepared having appropriate regard to the policies and objectives contained in the County Development Plan.

Conclusions

The reasonable alternative evaluation has resulted in the development of a LACAP that achieves the best environmental outcomes in comparison to other reasonable alternative considered.

The adoption of the mitigation measures integrated into the LACAP, in combination with the continued adoption of the development planning and control related environmental protection measures defined in the CDP will prevent, reduce and as fully as possible offset any potential negative environmental effects due to the implementation of the LACAP. No further mitigation measures were required for the LACAP.

Monitoring Measures

The SEA Directive requires that the environmental effects of the implementation of a plan are monitored in order 'to identify at an early stage unforeseen effects, and to be able to undertake appropriate remedial action.'

A series of indicators and targets were established for identified SEOs to enable ongoing monitoring and measurement of LACAP implementation performance, the environmental effects of the implementation of the LACAP and the efficacy of environmental mitigation measures. Such monitoring will be carried out regularly to support LACAP implementation.

SEO indicators are simple and effective quantifiable indicators used to measure the environmental effects of implementing the LACAP and the progress of SEO objectives and targets. SEO targets set focussed, measurable aims and thresholds that the LACAP can support the achievement of.

A robust monitoring programme has been established for the implementation of the LACAP.

Where monitoring identifies that the implementation of the LACAP is having a significant negative environmental effect, an in-depth review of the LACAP should take place and the LACAP should be updated in a manner that satisfactorily mitigates these environmental effects (i.e., through the adoption of additional environmental mitigation measures.). Similarly, where monitoring indicates that potential positive environmental effects associated with LACAP implementation are not being adequately realised, the LACAP should be reviewed and updated in a manner that supports the realisation of all potential positive environmental effects, having regard to the overall vision and high-level objectives of the LACAP.



1. INTRODUCTION

1.1 Background

Waterford City and County Council (WCCC) has prepared the Local Authority Climate Action Plan (herein referred to as the 'LACAP') 2024-2029 for the Waterford functional area.

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 (herein referred to as the 'Climate Act') sets out the provisions governing the establishment and operation of a LACAP. The broad purpose of a LACAP is to define adaptation and mitigation measures at local level to support the reduction of Greenhouse Gas (GHG) emissions within a local authority as an organisation and throughout the local community. LACAPs shall be implemented over a five-year period. The Minister for the Environment, Climate and Communications has instructed each Local Authority to make a LACAP within 18 months of enactment and local authorities have 12 months to finalise these plans.

Given the scale and nature of the LACAP, environmental effects were likely, and therefore Strategic Environmental Assessment (SEA)² was required to be undertaken on the LACAP. Fehily Timoney and Company (FT) have been commissioned by WCCC to complete an SEA for the LACAP.

1.2 SEA Environmental Report

This document has been produced by FT and is the SEA Environmental Report for the LACAP. It forms the main written output of the SEA process and as such presents information on the environmental assessment and likely environmental issues related to the implementation of the LACAP.

The broad purpose of this SEA Environmental Report was as follows:

1. Identify, evaluate and describe the likely significant effects on the environment of the LACAP and reasonable alternatives.
2. Inform the preparation of the LACAP.
3. Provide environmental authorities and the public with an early opportunity to make submissions on a draft version of the LACAP and its potential environmental effects - and incorporate changes where necessary to the LACAP and SEA processes.

² SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt it.



1.3 Background to SEA and Legislative Context

SEA was required under the EU Council Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive)³. The SEA Directive requires that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

The overarching objective of the SEA Directive is *'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans.... with a view to promoting sustainable development'*⁴

SEA is a process for evaluating, at the earliest appropriate stage, the environmental consequences of implementing Plan or Programme (P/P) initiatives prepared by authorities at a national, regional or local level or which have been prepared for adoption through legislative means.

SEA is described within the Department of the Environment, Community and Local Government's (2004) Guidelines for Regional Authorities and Planning Authorities on the Implementation of SEA Directive (2001/42/EC) as the *'formal systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt the plan or programme'*.

SEA is intended to provide the framework for influencing decision-making at an earlier stage when P/Ps – which give rise to individual projects – are being developed. It is noted that SEA should result in more sustainable development through the systematic appraisal of policy options.

1.4 Purpose of this SEA

The purpose of SEA in this particular case was to enable the local authority to incorporate environmental considerations into decision-making at an early stage and in an integrated way throughout the LACAP-development process and to:

1. Identify, evaluate and describe the likely significant effects on the environment of implementing the LACAP.
2. Ensure that identified adverse effects are communicated, mitigated and that the effectiveness of mitigation is monitored.
3. Identify beneficial (and neutral) effects, and to ensure these are communicated.
4. Provide an opportunity for stakeholder and public involvement.

³ Transposing Irish Regulations: S.I. No. 435 of 2004 (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by S.I. No. 200 of 2011 (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011). S.I. No. 436 of 2004 (Planning and Development (Strategic Environmental Assessment) Regulations 2004, as amended by S.I. No. 201 of 2011 (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011).

⁴ Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities (Department of the Environment, Community and Local Government, 2004)



1.5 Appropriate Assessment

Appropriate Assessment (AA) is an assessment process focusing on potential effects related to European Sites - which form the Natura 2000 network - these sites have been designated or proposed for designation by virtue of their ecological importance. European Sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

The Habitats Directive⁵ requires, inter alia, that plans (such as the LACAPs) undergo Screening for AA (Stage 1) and if necessary, the preparation of a Natura Impact Report (Stage 2), to establish the likely or potential effects on European Sites arising from plan implementation.

This first stage of the AA process is referred to as 'Screening for AA' and the purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a European Site in view of the site's conservation objectives.

AA Screening concluded that there are likely significant effects to European sites - if unmitigated - from the implementation of the LACAP. Therefore, the LACAP was subject to stage 2 of the AA process, and a Natura Impact Report (NIR) was prepared alongside the SEA - the details of which were integrated into the SEA process.

⁵ Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora



2. THE LACAP

2.1 Overview

The WCCC LACAP is an action plan which defines local level climate adaptation and mitigation measures to support the reduction of GHG emissions within the local authority as an organisation and throughout the local community in the local authority's functional area.

The LACAP should have an inward and outward focus. Climate action in the LACAP has been defined by local authorities for their own organisation which they have full control over (i.e., the inward focus), and for communities in their functional area, which they exert a strong influence over in partnership with relevant stakeholders (i.e., the outward focus).

The plan period for the LACAP is from 2024 to 2029. The Council must review and update the LACAP after a period of 5 years.

The LACAP was developed in accordance with the requirements of Section 16 of the Climate Act. It is consistent with the Climate Action Plan 2023 (CAP23) and the National Adaptation Framework. Local Authority Development Plans are also be aligned with their LACAP.

2.2 Context

Climate change refers to the long-term changes in the earth's weather patterns or average temperatures. In Ireland this is demonstrated by rising sea levels, extreme weather events and changes in the eco-system. Extensive research and a significant body of evidence has shown a correlation between the increasing global average temperature and the increasing quantity of GHG released into the atmosphere, particularly from anthropogenic sources.

Changes in weather patterns and climate can have significant adverse impacts on the environment and human beings. The Intergovernmental Panel on Climate Change (IPCC) published the *Climate Change 2022: Impacts, Adaptation and Vulnerability in 2022*. Included in this report is an outline of observed impacts of climate change on the environment and human beings. These include impacts from inland flooding, damages to infrastructure, impacts from infectious disease, displacement, animal and livestock health and productivity, mental health and water scarcity derived from climate change.

The seriousness of the potential impacts and risks associated with climate change is reflected in the vast quantity of international, European and national legislation that has been introduced to mitigate those impacts and risks.

The Irish Climate Act provides a statutory underpinning to climate action in Ireland. It specifies the requirement to develop a national Climate Action Plan (and update it every year), a National Adaptation Framework (NAF), a National Long Term Climate Action Strategy and Sectoral Adaptation Plans (SAPs). It also specifies a series of carbon budgets and the associated sectoral emission ceilings.

It sets out actions that must be taken to ensure delivery of commitments and a target to reduce GHG by 51% by 2030 and to achieve net zero GHG emissions by 2050. The successful delivery of climate action and the achievement of these targets will require significant, unanimous effort across all sectors of society.



A key element of the Climate Act is the requirement under Section 16 for local authorities to prepare individual LACAPs for their functional area. The purpose of LACAPs are to deliver effective climate action and mitigation at local authority and community levels. The Act acknowledges that local authorities are key drivers in advancing and delivering on climate policy.

2.3 LACAP Content

The LACAP focusses on several goal areas which are considered to be key for achieving a climate resilient and climate neutral future at organisational and community level. A number of main objectives have been developed for each goal area. Multiple specific actions have been defined to support the achievement of these main objectives. An overview of the goal areas and main objectives under the LACAP is presented in Table 2-1. The Decarbonising Zone Priority Areas and Objectives are presented in Table 2-2.

Table 2-1: LACAP Goal Area and Main Objectives

Goal Area	Main Objective
Governance & Leadership	To take on a leadership role in the implementation of climate action measures across Waterford City and County, ensuring cross-departmental collaboration within the Council and influencing external stakeholders to lead by example in their areas of responsibility.
Built Environment & Transport	To reduce Waterford City and County Council’s greenhouse gas emissions by reducing reliance on fossil fuels through increased energy efficiency, a move to active and public transport, deployment of renewable energy technologies and influencing behavioural change internally and externally.
Natural Environment & Green Infrastructure	To protect and enhance Waterford’s blue and green infrastructure to ensure biodiversity is supported, nourished and expanded upon, to mitigate against climate change risks and to enhance the health and wellbeing of all through enhanced connection with and access to nature.
Communities, Resilience & Transition	To give all people of Waterford an opportunity to participate in the transition to a low carbon economy that will build community, develop skills and benefit local businesses.
Sustainability & Resource Management	To ensure waste generated is reduced, removed and reused through the implementation of effective waste management policies and procedures and to shift away from a “take-make-waste” model towards a more sustainable and circular economy to create long-term environmental, economic and social benefits.



Table 2-2: Decarbonising Zone Priority Areas and Objectives

Priority Area	Main Objective
Collaboration across bodies working within the city	To create a neighbourhood approach to Climate Action where all members of the community are playing a role in partnership with WCCC in identifying opportunities for reducing carbon and improving health, in trialling new climate solutions and in promoting Climate Action in their community/organisation.
Climate Adaptation	To use Nature Based Solutions to reduce extreme weather impacts, improve air quality and provide amenity for citizens.
Biodiversity	Increasing nature within the city will benefit citizens and will help the city to adapt to a changing climate.
Energy	To improve energy efficiency in Council and in private buildings and to maximise the renewable energy generation opportunities in the city.
Environmental Awareness	To give all citizens of Waterford the opportunity to play their part in, and to benefit from, the transition to a low-carbon, sustainable city.
Financing	To learn from other cities and put in place innovative funding mechanisms to take advantage of renewable energy and housing energy upgrades.
Housing	To improve the energy efficiency of older houses in WCCC's social housing stock.
Planning	To ensure that all developments in the city are designed to adapt to Climate Change while also contributing to a low carbon and sustainable lifestyle for citizens.
Waste	Waterford City will be a place where materials can be borrowed, repaired, reused and recycled, where the economy will be circular.
Transport	To be a healthy, active city with low air pollution that provides its citizens with multiple transport options, allowing people to get where they are going in a timely manner.

2.4 Overall Vision and Strategic Outcomes

The overall vision of the LACAP is as follows:

- 'To be a climate resilient and low carbon organisation that inspires, leads, and facilitates ambitious and just climate action across the county and city.'

The following mission has been defined for the LACAP.

- 'To realise the ambitious targets set out in the Climate Action and Low Carbon Development (Amendment) Act 2021 while influencing and supporting positive climate action throughout the community, ensuring that Waterford remains an attractive and sustainable place to live, visit, study and do business in, for present and future generations.'



The Waterford's Climate Action Plan (CAP) will:

1. Ensure that Waterford is ambitious in its approach to climate action and that measures are implemented based upon the best available science.
2. Identify and deliver a Decarbonizing Zone within the local authority area to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.
3. Integrate renewable energy technologies into Council business operations for public benefit.
4. Preserve and promote the cultural heritage and biodiversity of Ireland's oldest city and the wider county area.
5. Promote the quality of life and healthy living through the delivery of high-quality services.
6. Encourage a culture of innovative thinking to foster a sustainable economy in Waterford and throughout the Southeast.
7. Enshrine the National Climate Objective in annual Council work plans to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.'

Through the development and implementation of specific, action-focused, time-bound and measurable actions, the LACAP will achieve the following strategic outcomes (as defined by the Department of the Environment, Climate and Communications Guidelines for Local Authority Climate Action Plans):

1. Provide a strong emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level, while addressing context-specific conditions and support for locally tailored policy making.
2. Deliver and promote evidence-based and integrated climate action by way of adaptation and mitigation measures, centred around a strong understanding of the role and remit of the local authority on climate action.
3. Translate and provide strategic direction at local and community levels on the delivery of the national climate objective which is seeking to curb further global warming and to transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy by no later than the end of 2050.

2.5 Relationship of the LACAP with other Relevant Plans and Programmes

An examination of how the LACAP interrelates with other national, regional and local plans and programmes has taken place and is documented in Appendix 1.



3. SEA METHODOLOGY

3.1 The SEA Process

The SEA process can be defined by four stages, all of which include some level of consultation with stakeholders and the public (Figure 3-1). These stages are defined as:

- Stage 1 – Screening: deciding whether an SEA is required, or not.
- Stage 2 – Scoping: establishing the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts.
- Stage 3 – Identification, Prediction, Considerations of Alternatives, Evaluation and Mitigation of Potential Impacts.
- Stage 4 – Consultation, Revision and Post-Adoption. This includes the implementation of statutory SEA monitoring.

The SEA process runs in parallel with the Appropriate Assessment (AA) process, which is briefly discussed in Section 1.5

This SEA Environmental Report documents the outcomes of Stage 3.

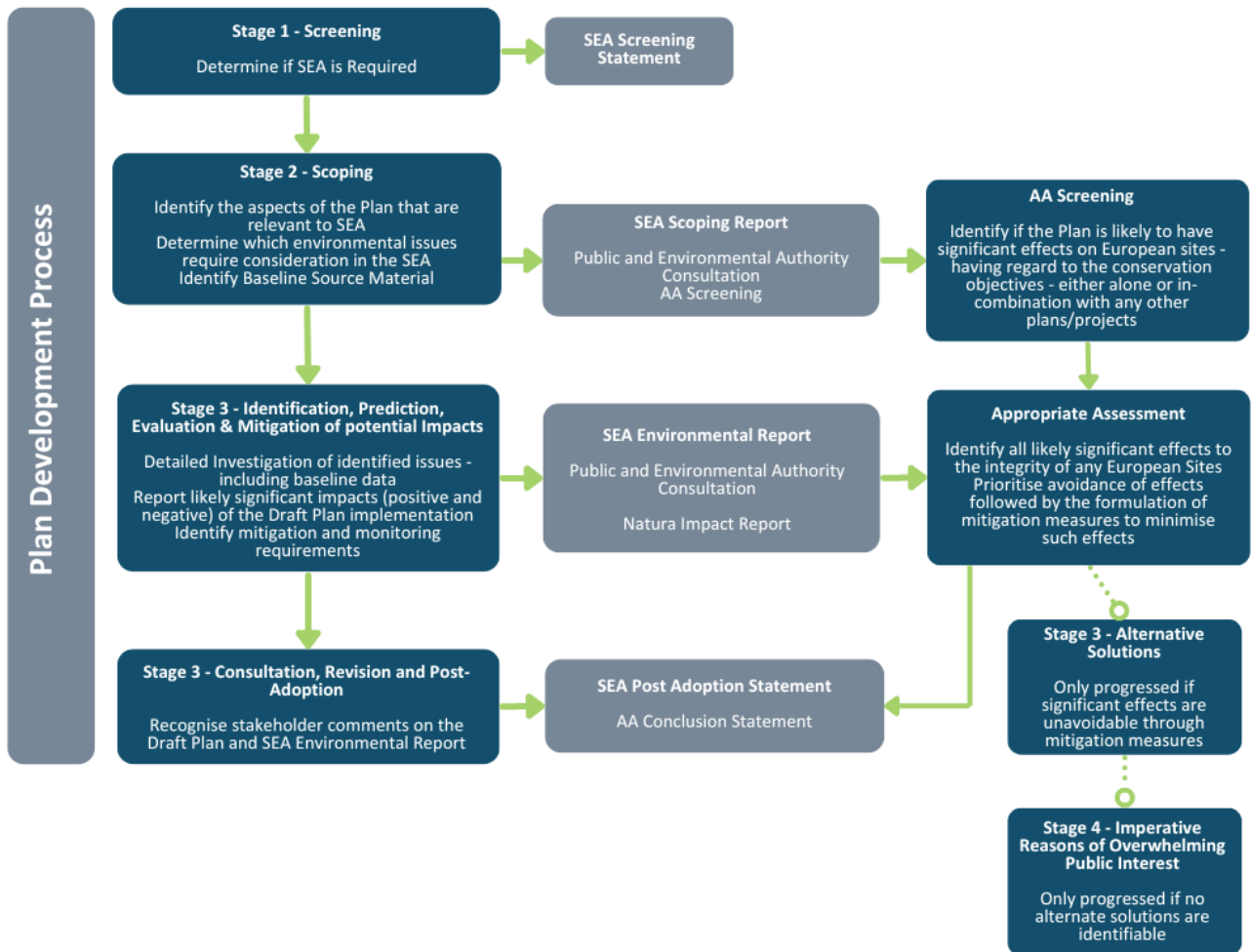


Figure 3-1: SEA and AA Stages and Key Deliverables

3.2 Overview of the LACAP SEA and AA Processes

Given the scale and nature of the LACAP, environmental effects were likely, and therefore SEA was 'screened in' in this instance.

An SEA Scoping Report was produced for an initial draft version of the LACAP. This SEA Scoping Report, along with SEA scoping submissions and consideration of these submissions by the SEA process, helped communicate and define the scope of the environmental issues that were dealt with by the SEA, as per the SEA Guidelines⁶.

Figure 3-2 provides an overview of the integrated LACAP-preparation and SEA, AA⁷ processes. The preparation of the LACAP, SEA and AA took place concurrently and the findings of the SEA and AA informed the LACAP.

⁶ Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities (DEHLG, 2004), Page 18 "It is recommended that at the end of the scoping procedure, the plan-making authority should prepare a brief scoping report of its conclusions as to what information is to be included in the environmental report, taking account of any recommendations from the environmental authorities."

⁷ AA is a focused and detailed impact assessment of the implications of a strategic action or project, alone and in combination with other strategic actions and projects, on the integrity of a European site in view of its conservation objectives.



Taking into account the scope detailed in the SEA Scoping Report, which was produced for the initial draft version of the LACAP, the environmental effects associated with the implementation of the LACAP were identified, evaluated and described in this SEA Environmental Report. This report also defined mitigation measures to prevent adverse environmental effects due to the implementation of the LACAP.

A draft version of this report accompanied the draft version of the LACAP on public display as part of the required statutory public consultation. The findings of the AA were integrated into the SEA Environmental Report. A draft version of the AA documents was also placed on public display. The SEA followed elements of Integrated Biodiversity Impact Assessment⁸.

Consultation submissions relating to the documentation were responded to in the local authority Chief Executive's report on public consultation. Updates were made to the SEA and AA documentation where relevant following on from receipt and consideration of the consultation submissions.

Any proposed modifications to the LACAP at that stage were examined to ensure they did not generate additional likely, significant effects on the receiving environment or the Natura 2000 network of designated ecological sites not previously considered by the SEA/AA processes.

This SEA Environmental Report and associated AA documentation have now been finalized in advance of the adoption of the LACAP.

An SEA Statement, which will include information on how environmental considerations were integrated into the LACAP, will be prepared in advance of plan publication.

The LACAP will then be implemented, and SEA environmental monitoring will be undertaken to measure the environmental effects of the LACAP.

⁸ As detailed in the EPA's 2013 Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual.

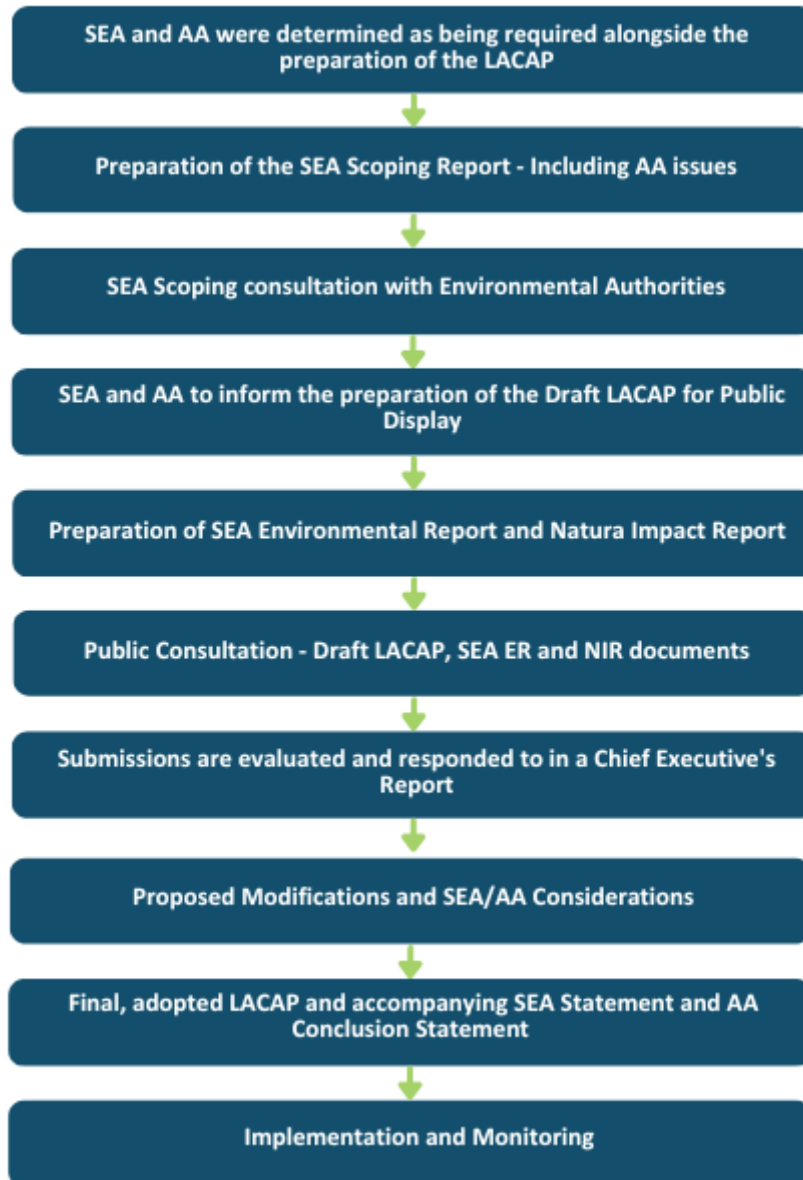


Figure 3-2: Overview of the SEA Process in the Review and Preparation of the Local Authority Climate Action Plan (including AA processes)



3.3 SEA Processes Undertaken To Date

3.3.1 SEA Screening

The first stage of the SEA process was to carry out SEA Screening to determine the requirement for SEA of a P/P.

The first stage in determining whether a P/P requires SEA is the carrying out of a 'Pre-screening Check' (also known as a 'Stage 1 Applicability'). This allows rapid screening-out of P/P that are clearly not going to have any environmental impact and screening-in of those that do require SEA. The second stage in determining whether a P/P requires SEA is known as 'Stage 2 Screening.' The purpose of this stage is to determine whether a P/P is likely to have significant effects on the environment and whether SEA must be carried out in conjunction with a P/P. The application of environmental significance criteria is important in determining whether an SEA is required. Annex II of Directive 2001/42/EC sets out the 'statutory' criteria that should be addressed when undertaking this stage.

Given the scale and nature of the LACAP, environmental effects were likely, and therefore SEA was 'screened in' in this instance. An SEA Screening Statement to this effect was produced by the WCCC LACAP.

The main reasons for 'screening in' in the LACAP are listed below:

1. The LACAP will define a framework sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources.
2. The LACAP has the potential to give rise to environmental problems.
3. The LACAP will support the achievement of the principles and policies of European climate change related legislation (e.g., 'European Climate Law'⁹).
4. The LACAP has the potential to likely significant environmental effects based its impact on likely impact on land use and development, its county-wide geographic scope and the breadth of receiving environmental sensitivities within the county.

3.3.2 SEA Scoping

The second stage of the SEA process is carrying out SEA Scoping. The purpose of SEA Scoping is to establish the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts. An SEA Scoping Report is produced to document the scoping process.

FT produced a final SEA Scoping Report for an initial draft of the LACAP which was informed by consultation responses from the environmental authorities. The SEA Scoping Report outlined information on the LACAP, including the need for the LACAP, its temporal and geographical area and overall objectives. It facilitated scoping the Environmental Components and understanding the environmental issues to be considered under the SEA process. The Scoping Report was also required to facilitate statutory consultation to ensure that the approach proposed for the SEA is appropriate. A copy of this report was made available to the statutory Environmental Authorities.

⁹ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999



The SEA Scoping Report, along with SEA scoping submissions and consideration of these submissions by the SEA process, helped communicate and define the scope of the environmental issues which are to be dealt with by the SEA, the methods which will be used to address these issues, and the level of detail required to address these issues, as per the SEA Guidelines¹⁰.

The Environmental Components in the SEA Directive that were 'scoped in' are as follows:

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeology & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change

3.3.3 SEA Consultation

Consultation with statutory Environmental Authorities was undertaken to inform the SEA Scoping process. A draft version of the SEA Scoping Report and appropriate SEA Scoping Questions were issued to statutory Environmental Authorities. The consultation period lasted for 4 weeks.

The following statutory Environmental Authorities were consulted on the scope and level of detail of the information to be included in the SEA Environmental Report:

- Department of Agriculture, Food and the Marine (DAFM)
- Department of the Environment, Climate and Communications (DECC)
- Department of Housing, Local Government and Heritage (DHLGH)
- Environmental Protection Agency (EPA)

The consultation feedback is presented in Appendix 2.

¹⁰ Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities (DEHLG, 2004), Page 18: "It is recommended that at the end of the scoping procedure, the plan-making authority should prepare a brief scoping report of its conclusions as to what information is to be included in the environmental report, taking account of any recommendations from the environmental authorities."



In addition to the above statutory Environmental Authorities, the following interested stakeholders were consulted during public consultation on the SEA Environmental Report:

- An Taisce
- Birdwatch Ireland
- Climate Change Advisory Council
- Coastwatch
- Department of Enterprise, Trade and Employment (DETE)
- Department of Transport (DoT)
- Electricity Supply Board (ESB)
- Fáilte Ireland
- Gas Networks Ireland
- Industrial Development Authority (IDA)
- Inland Fisheries Ireland (IFI)
- Inland Waterways Association of Ireland (IWAI)
- Landscape Alliance Ireland
- Neighbouring Local Authorities
- Marine Institute
- Office of Public Works (OPW)
- Regional Authorities¹¹
- Sustainable Energy Authority of Ireland (SEAI)
- Teagasc
- Tourism Ireland

Members of the public were also provided with an opportunity to make submission on the draft version of the LACAP.

All consultation responses received from the above interested stakeholders and members of the public were considered as appropriate during plan-making, SEA and AA processes.

¹¹ Southern Region.



3.4 SEA Environmental Report

3.4.1 Environmental Assessment Approach and Methodology

The third stage involved the strategic level identification, prediction, evaluation and mitigation of potential environmental impacts associated with the LACAP. An SEA Environmental Report was produced to document this process. The SEA Environmental Report is integral to the SEA process and is compiled during the LACAP-making process to allow for adequate consideration of the likely, significant environmental effects of the LACAP and the incorporation of appropriate environmental mitigation measures into the LACAP. It should serve to guide the LACAP-making process and ensure optimal environmental outcomes.

The SEA Environmental Report forms the main written output of SEA process. It serves to document the evaluation of the likely, significant environmental effects of implementing the LACAP on the relevant Environmental Components defined in the SEA Directive. It defines Strategic Environmental Objectives (SEOs) and associated targets and indicators relating to each Environmental Component area. It defines environmental mitigation measures to prevent, reduce and offset the likely, significant environmental effects of implementing the LACAP and monitoring measures to measure the environmental effects of the LACAP. It provides the plan-makers, statutory Environmental Authorities, interested stakeholders and the general public with a clear understanding of likely, significant environmental effects associated with implementing a P/P.

A summary of the information contained in an SEA Environmental Report is presented below:

- A non-technical summary of the environmental assessment carried out to inform the SEA Environmental Report.
- A description of the P/P under consideration, including detail on the main objectives of the P/P, the contents of the P/P, anticipated P/P outcomes, and how the P/P relates to other P/Ps.
- A description and characterisation of the baseline environment that has the potential to be affected by the implementation of the P/P, including the evolution of the baseline environment without the implementation of the P/P (i.e., under a 'do-nothing' or 'do-minimum' scenario).
- A description of any existing environmental problems relevant to the P/P.
- Environmental protection objectives (including indicators and targets) relevant to the P/P and the way these objectives and environmental considerations have been taken into during the LACAP-making process.
- A description of reasonable alternatives identified, the reasons for considering these alternatives within the scope of the environmental assessment, and an evaluation of their likely significant effect on the environment.
- An evaluation of the likely significant effects of the implementation of the P/P (including reasonable alternatives) on the environment, and in particular on the following environmental components: biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of environmental mitigation measures proposed to prevent, reduce and offset likely significant environmental effects that may occur dur the implementation of the P/P.
- A description of the monitoring measures to be implemented to monitor the likely, significant effects of implementing a P/P.



This SEA Environmental Report has been produced for WCCC's LACAP and was issued to the statutory Environmental Authorities and identified interested stakeholders to allow them to make submissions on the LACAP, the environmental assessment undertaken, and the environmental mitigation and monitoring measures proposed. It was also published for public display with the a draft version of the LACAP, to allow for members of the public to make submissions on the environmental assessment.

3.4.2 SEA Environmental Report Authors

FT is a consultancy based in Cork, Carlow and Dublin, specialising in civil and environmental engineering, planning and environmental assessment. The company has established an experienced, professional team specialising in all forms of statutory environmental assessment, including EIA, AA and SEA. This team has the support of many in-house engineers, scientists, planners and subject specialists.

FT was retained by WCCC to undertake SEA of the LACAP and are responsible for the completion of this SEA Environmental Report. The competent experts involved in the preparation of this SEA Environmental Report are outlined in Table 3-1:

Table 3-1: SEA Environmental Report Authors

Name and Qualifications	Project Role	Relevant Experience
Bernie Guinan MSc, BSc. (Envi. Sci & Tech), Dip. Pollution Assessment Control Dip. Business Development	Project Director	Bernie is Director with FT responsible for Waste & Resource Management and Environmental Science. She has 20 years' experience in delivering and managing projects in the environmental sector. Bernie has extensive experience coordinating EIA, SEA and AA projects, including large-scale and complex projects. She has in-depth knowledge of all environmental and planning policy, legislation and guidance.
Andrew Torsney PhD, Ecotourism and visitor Behaviour Analysis, Trinity College Dublin, 2018 – Present (Part time) MRes Biodiversity and Conservation (Hons.), University of Leeds, UK, 2011 - 2012 BSc Zoology, University College Dublin, 2007 - 2011	Project Manager	Andrew has over 10 years' experience as a professional ecologist. He is responsible for all ecological work from project design and implementation to the preparation of reports. Interaction with key stake holder and statutory bodies such as the NPWS and the EPA is a vital part of this role. His role is diverse and complex working at both plan and project level. He has been the principal ecologist responsible for the preparation and co-ordination of SEA and AA for many statutory land use plans; as well as EclAs, EIARs and AAs of Projects. Andrew has comprehensive technical knowledge in ecological assessments and legalities of the planning processes to facilitate streamlined delivery of assessments. Andrew is an experienced ecologist who holds four national species derogation licenses for bats (photography & roost disturbance), otters and badgers. Andrew has authored the NBDC Identification Guide to Irelands Bats and the Identification Guide to Regulated Invasive Plants. Andrew is an experienced botanical specialist with a focus on Annex I grassland habitats, having worked on the translocation of lowland hay meadow [6510] containing the floral protection order species meadow barley (<i>Hordeum secalinum</i>).
Richard Deeney Advanced Diploma in Planning and Environmental Law, Kings Inns, Ireland 2017	SEA Team Lead	Richard is Senior Environmental Scientist at Fehily Timoney. Richard holds a B.Sc. First-Class Honours degree in Environmental Management from Dublin Institute of Technology. Richard works in the Waste and Environment team at Fehily Timoney and is experienced in project managing and coordination of Planning Applications, Strategic Environmental Assessments, Environmental Impact Assessment Reports and Environmental Assessment, EIAR



Name and Qualifications	Project Role	Relevant Experience
<p>B.Sc. First Class Honours Degree, Environmental Management, Dublin Institute of Technology, 2012</p> <p>Chartered Environmentalist, The Society for the Environment</p>		<p>Screening and Scoping Reports, the development of Environmental Management Plans and Systems, Environmental Auditing, and Air Emission Assessment.</p> <p>Richard has excellent experience in planning and environmental assessment for various types of development including waste facilities, quarries, renewable energy development and tourism development. He has experience completing baseline air emissions assessments for a range of organizations.</p>
<p>Eunice Wong</p> <p>B.Sc. First Class Honours, Environmental Science and Sustainable Technology, Munster Technological University, 2022</p>	Project Support	<p>Eunice is an Environmental Scientist on the Waste and Environmental Team at Fehily Timoney and Company. Eunice holds a First-Class Honours BSc in Environmental Science and Sustainable Technology from Munster Technological University.</p> <p>Eunice has been involved in a variety of diverse and challenging projects since joining FT covering key aspects of remediation, baseline emission inventories, amenity development, environmental assessment, and monitoring. She has been responsible for the research, data collation, validation, and analysis for a multitude of projects, including desk-based studies, research, as well as the development of associated reports.</p>
<p>Bruna Felipe</p> <p>BE (Hons) Environmental Engineering UNESP, Sao Paulo State University, Brazil</p>	Project Support	<p>Bruna is a Project Environmental Engineer of Fehily Timoney and Company. Brunna holds a BE of Environmental Engineering from UNESP, Sao Paulo State University, Brazil.</p> <p>Bruna has been involved in a range of contaminated land projects and Tier II Environmental Risk Assessments (ERA). Brunna has been responsible for the data collation, validation and analysis for the preparation of ERA reports for a range of landfill related projects, including works related to meeting environmental monitoring and license compliance for a variety of landfills. She has been involved in the preparation of Appropriate Assessment reports and a European Sites library for the Department of Agriculture, Food and Marine. She also has experience developing baseline emission inventories and conducting baseline environmental assessments for multiple projects.</p>
<p>Eibhlín Vaughan</p> <p>First Class Honors BA in Environmental Science, Trinity College Dublin ,2020</p>	Project Support	<p>Eibhlín is an Environmental Scientist on the Waste and Environmental Team at Fehily Timoney and Company. Eibhlín holds a BA in Environmental Science from Trinity College Dublin where she achieved First Class Honours.</p> <p>As a Graduate Environmental Scientist, she has undertaken a dynamic role, spanning EIAR handling, environmental monitoring, proficient report writing, research, data analysis, and the formulation of effective waste management strategies. Alongside her role within the company, Eibhlín is also completing a Research MEngSc in University College Dublin, for which data collection, analysis, and report writing and presentation play a key role.</p>

3.4.3 Difficulties Encountered

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



3.4.4 SEA Environmental Report Checklist

A checklist of information that must be included in this SEA Environmental Report under the SEA Directive and transposing national legislation¹² is provided in Table 3-2. This checklist cross-references the sections in the report where information can be found.

Table 3-2: SEA Environmental Report Checklist

Information Required	Relevant Section of the SEA Environmental Report
An outline of the contents and main objectives of the LACAP and relationship with other relevant plans.	Section 2.
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the LACAP.	Section 4.
The environmental characteristics of areas likely to be significantly affected.	Section 4.
Any existing environmental problems which are relevant to the LACAP including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive.	Section 4.
The environmental protection objectives, established at international, European Union or national level, which are relevant to the LACAP and the way those objectives and any environmental considerations have been taken into account during its preparation.	Section 5.
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Section 7 and Appendix 3.
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the LACAP.	Section 8.
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Section 6.
A description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the LACAP.	Section 10.
A non-technical summary of the information provided under the above headings.	Front Section
Interrelationships between each Environmental Component.	Section 7 and Appendix 3.

¹² The Environmental Report is required to contain the information specified in Annex 1 of the SEA Directive and Schedule 2 and 2B of S.I. 435 and 436 of 2004.



3.5 SEA Statement

The final LACAP will be published by February 2024 at the latest. WCCC will publish a post adoption SEA Statement alongside the final LACAP. The post adoption SEA Statement is another integral component of the SEA process.

The SEA Statement will provide detail on how the environmental assessment and considerations detailed in the SEA Environmental Report and SEA related consultation responses throughout the process have influenced the LACAP-making process. It will summarise the reasoning for choosing the adopted, final LACAP in light of other reasonable alternative. The SEA will contain detail of environmental mitigation and monitoring measures to be implemented over the lifetime of the LACAP.

The main purpose of the SEA Statement is to provide interested parties with a good and clear understanding of how the SEA process was carried out during the LACAP-making process and how SEA informed and supported the process.

3.6 Integrated Biodiversity Impact Assessment

The environmental assessment undertaken was carried out in accordance with an Integrated Biodiversity Impact Assessment based methodology in accordance with EPA's guidance document entitled '*Final Report: Integrated Biodiversity Impact Assessment, Streamlining AA, SEA and EIA Processes. Best Practice Guidance.*' (2012).

The methodology employed facilitated the integration of SEA and AA processes relating to biodiversity impact assessment to ensure the effective and streamlined assessment of biodiversity impacts. The plan-making, SEA and AA processes - including scoping, baseline evaluation, impact assessment and mitigation/monitoring measure development processes - were carried out concurrently to facilitate holistic and complete assessment of biodiversity impacts. The effective communication and integration of scientific knowledge and analysis between assessments took place. The SEA was suitably informed by the analysis and conclusions in AA.

3.7 Outcomes of the LACAP SEA and AA Processes

The SEA and AA processes facilitated the integration of environmental considerations into the LACAP, including policies and objectives contributing towards environmental protection and management and sustainable development; and the integration of environmental considerations into the policies and objectives included as part of the LACAP.



4. THE ENVIRONMENTAL BASELINE

4.1 Introduction

An evaluation and a characterisation of the current state of the environment likely to be affected by the LACAP was undertaken to inform the SEA process. This section of the SEA Environmental Report documents this evaluation. The following Environmental Components were considered during this evaluation:

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeology & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change

Baseline environmental information for the local authority functional area (herein referred to as the 'study area') was gathered using available environmental datasets. The evaluation of the baseline environment was informed by the SEA Scoping Report produced and the consultation responses received during the SEA Scoping process. It was also guided and informed by the in-depth experience and expert judgement of the SEA Environmental Report Authors.

This section of the SEA Environmental Report included information on the state of the environment within the defined study area (Figure 4-1), including maps of individual environmental components, environmental sensitivity mapping and a description of the baseline environment under the Environmental Components identified by the SEA Directive and transposing Regulations (i.e. population and human health, biodiversity and flora and fauna, soil, water, air and climatic factors, material assets, cultural heritage, landscape and the interrelationship between these factors). Existing environmental problems which are relevant to the LACAP were identified and examined under each Environmental Component heading.

The SEA Environmental Report has also considered the zone of influence for the LACAP and included baseline information beyond the LACAP boundary for certain environmental components (E.g., European Sites and the status of shared water bodies).

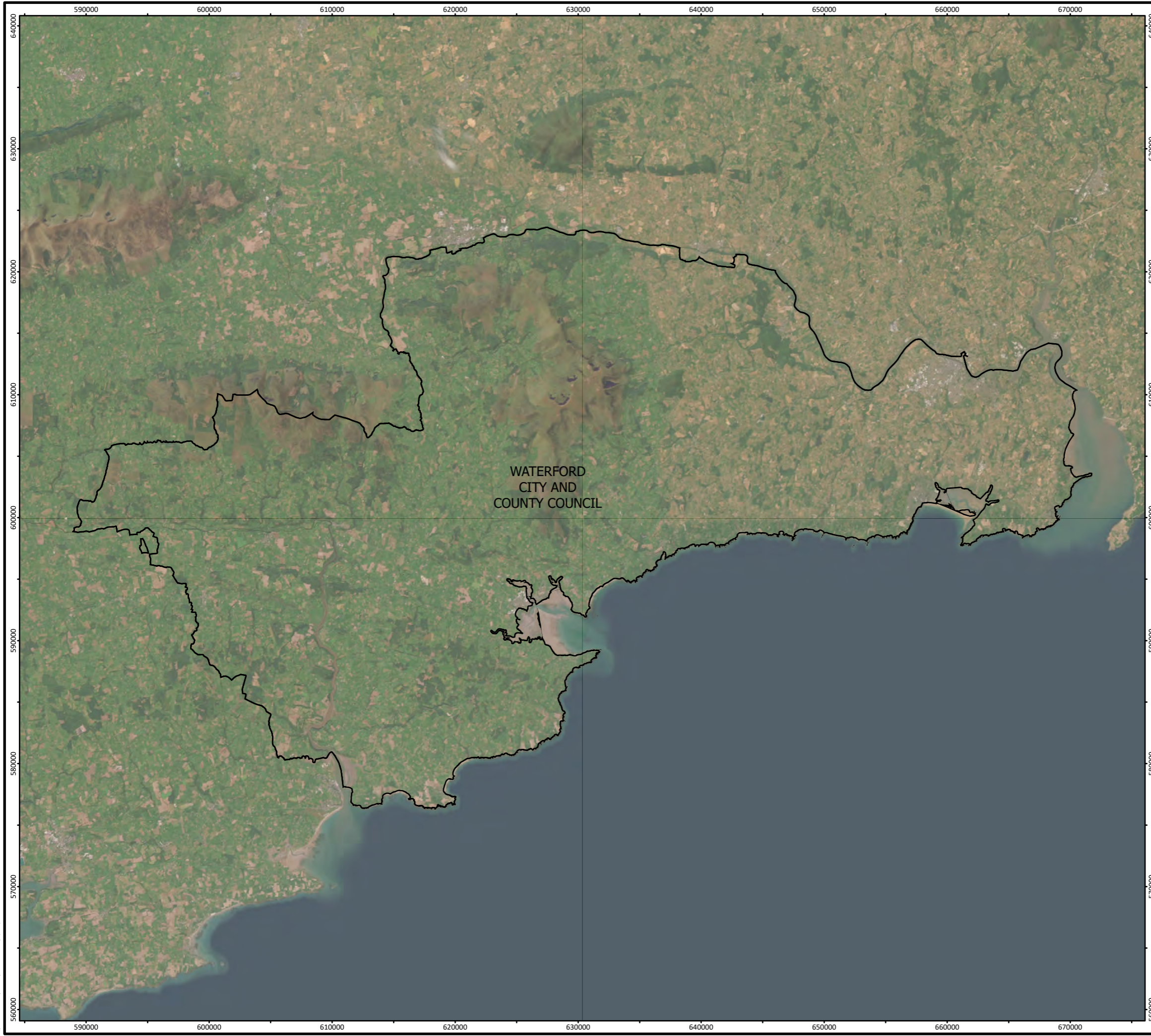



Information provided in this section is based on readily available baseline data from web-based searches and Geographic Information Systems (GIS) information. A key resource which was used throughout the SEA process is the EPA's SEA Spatial Information Sources Inventory¹³. The data presented in this section of the SEA Environmental Report is as up-to-date and as accurate as possible and is presented in a readily accessible format, where possible.

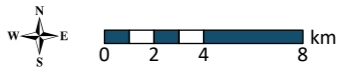
The interrelationships between Environmental Components are addressed throughout this section, as appropriate, under each Environmental Component heading. A summary of Environmental Component interrelationships is also provided.

This section of the SEA Environmental Report examines the likely evolution of the baseline environmental in the absence of the LACAP being implemented (i.e., in the 'do nothing' or 'do minimum' scenario).

¹³ Environmental Protection Agency. 2022. SEA Spatial Information Sources: Available at [Strategic Environmental Assessment | Environmental Protection Agency \(epa.ie\)](https://www.epa.ie/publications-and-resources/publications/sea-spatial-information-sources)



Legend
 Local Authority Boundaries

Local Authority Boundary	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.1
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
DATE: 15/08/2023	SCALE: 1:305,000 @ A3
	



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 OpenStreetMap © OpenStreetMap (map) contributors, CC-BY-SA
 Path: R:\Map Production\2023\P23-076\Workspaces\SEA\SEA_ER_Fig_4_1_Local_Authority_Boundary.aprx



4.2 Population and Human Health

4.2.1 Characterisation of the Environmental Baseline

In the 2022 Census, the total population of Waterford was 127,363 persons, showing the trend of an increase in total population in the County by ca. 9.6% (11,187 persons)¹⁴ since the previous Census. Southern Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019-2031 has listed the 2031 transitional population projection for Waterford as being 21,000-28,000 persons¹⁵.

There are no population projections in the LACAP as the provisions relate only to climate action – however, there are features within the LACAP which could influence population projections for the county and interact with various environmental components. Potential interactions include:

- Recreational and development pressure on habitats and landscapes,
- Renewable energy development could influence population dynamics within the county,
- Increased constraints on land use zoning objectives in the decarbonising zone, and
- Potential effects on water quality.

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses, for example.

4.2.2 Key Issues Relating to the LACAP

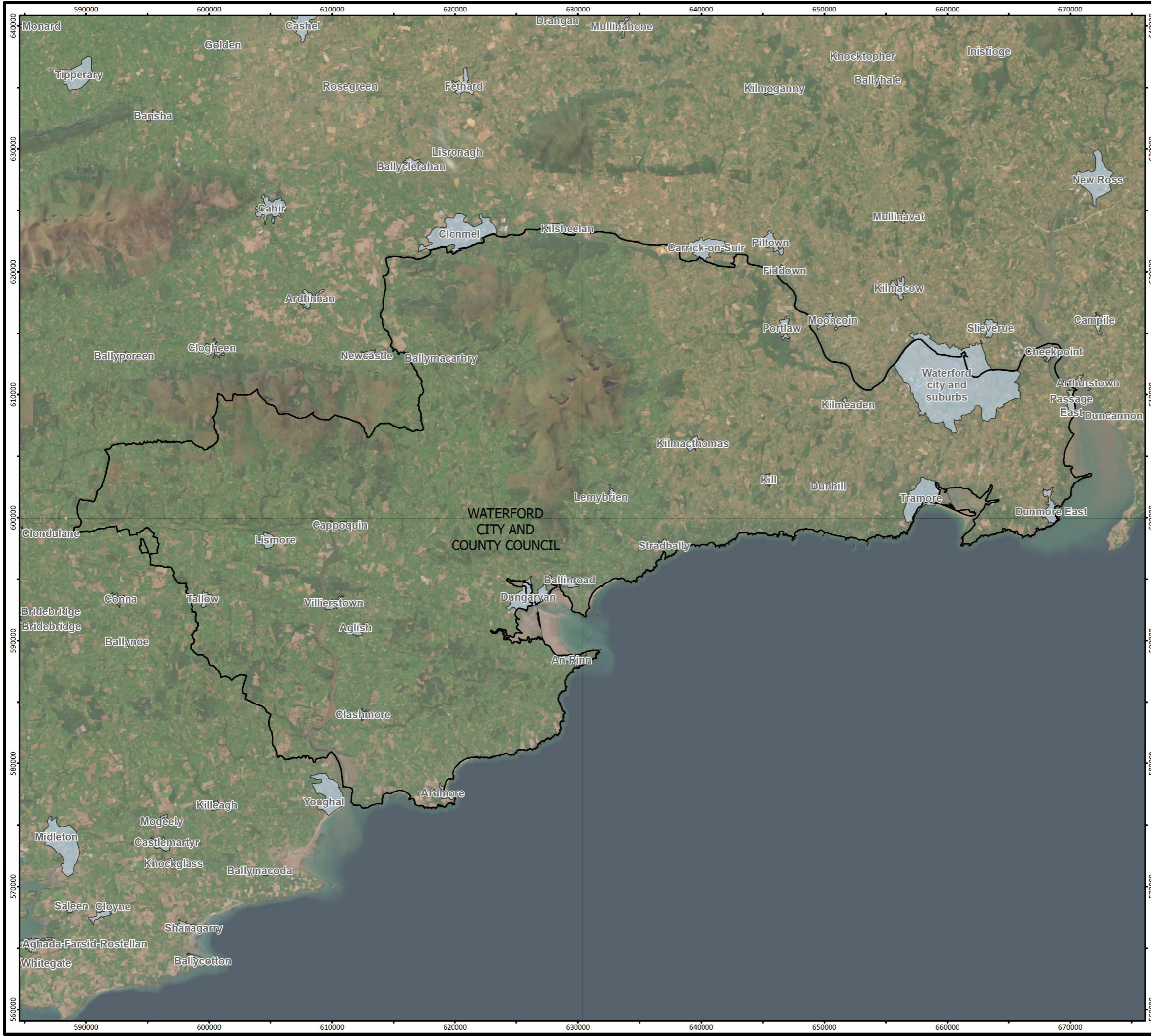
The key considerations in relation to Population and Human were as follows:

- Recreational and development pressure on habitats and landscapes,
- Population and development growth will potentially influence the energy requirement within the county,
- Population and development growth will potentially influence the decarbonising zone, and
- Potential visual effect of green infrastructure development.

¹⁴ Central Statistics Office. 2022. FY003B - Population and Actual and Percentage Change 2006 to 2022 (cso.ie) <https://data.cso.ie/table/FY003B>

¹⁵ *Regional Spatial and Economic Strategy for the Southern Region 2019-2031*

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 World Imagery: Earthstar Geographics, OpenStreetMap, © OpenStreetMap (and) contributors, CC-BY-SA



- Legend**
- Local Authority Boundaries
 - Census Settlements

Major Settlement Pattern	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.2
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
DATE:	30/08/2023
SCALE:	1:305,000 @ A3





4.3 Biodiversity, Flora & Fauna

4.3.1 Characterisation of the Environmental Baseline

The SEA considered available information on designated sites of conservation interest as well as protected species, ecological connectivity and non-designated habitats which have high ecological value. The SEA also identified data sources which may be appropriate to local, project level development and assessments.

There are a number of considerations for nature conservation designations in Waterford including:

Table 4-1: Designated Ecological Sites and Protected Species

Environmental Features	Description
UNESCO ¹⁶ (United Nations Educational, Scientific and Cultural Organisation) Global Geopark	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 raise awareness about geodiversity and promote protection, education and tourism best practices. 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.
Special Areas of Conservation ¹⁷ (SACs) ¹⁸	Designated under the Habitats Directive (Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). There are nine SACs designated within or partially within the County, including: Ardmore Head (002121); Blackwater River (Cork/Waterford) (002170); Comeragh Mountains (001952); Glendine Wood (002324); Helvick Head (000665); Lower River Suir (002137); Nier Valley Woodlands (000668); River Barrow and River Nore (002162); and Tramore Dunes and Backstrand (000671). These and other sites beyond the County border that could be affected by the LACAP were considered by the assessments.
Special Protection Areas ¹⁹ (SPAs) ²⁰	Designated under the Birds Directive (EC Directive 200/147/EC on the conservation of wild birds). There are six SPAs within or partially within the County: Blackwater and Callows (004094); Blackwater Estuary (004032); Dungarvan Harbour (004032); Helvick Head to Ballyquin (004192); Mid-Waterford Coast (004193); and Tramore Back Strand (004027). These and other sites beyond the County border that could be affected by the LACAP were considered by the assessments.
RAMSAR sites ²¹	The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory.

¹⁶ [UNESCO Sites in Ireland - HeritageMaps.ie - data.gov.ie](https://www.heritagemaps.ie/data.gov.ie)

¹⁷ [Designated site data | National Parks & Wildlife Service \(npws.ie\)](https://www.npws.ie/designated-site-data)

¹⁸ [Habitats Directive \(1992/43/EEC\) - habitats and species listed in Annex I and II](https://www.npws.ie/habitats-directive-1992-43-eeec)

¹⁹ [Designated site data | National Parks & Wildlife Service \(npws.ie\)](https://www.npws.ie/designated-site-data)

²⁰ [Birds Directive \(2009/147/EEC\)](https://www.npws.ie/birds-directive-2009-147-eeec)

²¹ [Ramsar Sites - Datasets - data.gov.ie](https://www.data.gov.ie/datasets/ramsar-sites)



Environmental Features	Description
	<p>Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares.</p> <p>There are three Ramsar sites designated within the County: Blackwater Estuary (in the south-west of the County); Dungarvan Harbour (in the south of the County); and Tramore Backstrand (in the east of the County).</p>
<p>Natural Heritage Areas²² (NHAs)</p>	<p>NHAs are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. There are no designated NHAs within, partially within or adjacent to the County.</p>
<p>Proposed Natural Heritage Areas (pNHAs)²³</p>	<p>pNHAs were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats. There are 31 pNHAs designated within, partially within or adjacent to the County, including Belle Lake (000659); Waterford Harbour (000787); Glencairn (002095); Ballin Lough (001691); and Kilbarry Bog (001700).</p>
<p>Tree Preservation Order (TPO)</p>	<p>Tree Preservation Orders may be made under Section 45 of the Local Government (Planning and Development) Act, 1963 and subsequent acts. Part XIII of the Planning and Development Act, 2000 sets out the provisions for TPOs. TPOs can be made in the interest of amenity or the environment and allow for the protection of individual or groups of trees. Existing TPOs within the County have been identified within the County Development Plan.</p>
<p>Flora Protection Order Sites²⁴</p>	<p>The Flora (Protection) Order, 2022 (S.I. No. 235 of 2022) gives legal protection to 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). The current list of plant species protected by Section 21 of the Wildlife Act, 1976 is set out in the Flora (Protection) Order, 2022, which supersedes orders made in 1980, 1987, 1999 and 2015. There are 15 locations in Waterford with a number of species protected by the Order, including: Tallowbridge (<i>Orthotrichum sprucei</i>); Ballynerroon East (<i>Orthotrichum sprucei</i>); Knocklofty Bridge (<i>Leptodon smithii</i>); Dromore-Lismore (<i>Orthotrichum sprucei</i>); Dungarvan (<i>Scleropodium touretii</i>); Deelish (<i>Fissidens rufulus</i>); Coumtay (<i>Hamatocaulis vernicosus</i>); Coumfea (<i>Barbilophozia atlantica</i>); Sgilloge Loughs (<i>Hamatocaulis vernicosus</i>)</p>
<p>Wildfowl Sanctuaries²⁵ (see S.I. 192 of 1979)</p>	<p>Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries. There are two Wildfowl Sanctuaries within or partially within the County: Coolfin Marshes (WFS-50); and River Blackwater (WFS-51)</p>
<p>Salmonid Waters²⁶</p>	<p>Salmonid waters are designated and protected as under the European Communities (Quality of Salmonid Waters) Regulations 1988 (SI No. 293 of 1988). Designated Salmonid Waters are capable of supporting salmon (<i>Salmo salar</i>), trout (<i>Salmo trutta</i>), char (<i>Salvelinus</i>) and whitefish (<i>Coregonus</i>). Sections of the Rivers Blackwater and Bride are listed under the Regulations.</p>

²² [Natural Heritage Areas \(NHA\) | National Parks & Wildlife Service \(npws.ie\)](https://www.npws.ie/natural-heritage-areas)

²³ [EPA Maps](https://www.epa.ie/maps)

²⁴ [Flora Protection Order Map Viewer \(npws.ie\)](https://www.npws.ie/flora-protection-order-map-viewer)

²⁵ [Wildfowl Sanctuaries | National Parks & Wildlife Service \(npws.ie\)](https://www.npws.ie/wildfowl-sanctuaries)

²⁶ [Register of Protected Areas - Salmonid Water Regs Table - Datasets - data.gov.uk](https://data.gov.uk/dataset/register-of-protected-areas-salmonid-water-regs-table)



Environmental Features	Description
OSPAR Marine Protected Areas ²⁷ (MPA)	Under the OSPAR Convention to Protect the Marine Environment of the North East Atlantic, Ireland committed to establishing marine protected areas to protect biodiversity (i.e., OSPAR MPAs). There are currently 19 OSPAR sites proposed in the State. There is one OSPAR Site designated adjacent to the Plan area: Tramore Dunes and Backstrand MPA (O-IE-0002974).
CORINE Landcover ²⁸	Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. The most dominant land cover type throughout the County is pastures. Concentrations of peat bogs occur mainly in the north-west and central parts of the County
National Parks	National Parks are specially designated protected areas of unspoilt beauty and there are six located in Ireland. The primary purpose of the National Parks is the conservation of biodiversity and landscape; however, they also provide recreational space for locals and visitors. There are no national parks in Waterford.
Nature Reserves ²⁹	A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State, but some are owned by organisations or private landowners. There are no Nature Reserves in Waterford

Additionally, the SEA considered non designated sites for impacts with regard to aspects such as:

Table 4-2: Ecological Connectivity and Non-designated Habitats

	Description
Ecological connectivity and networks (including stepping stones and corridors)	Coastal systems, riparian habitats, hedgerow and other blue and green infrastructure networks. Ecological connectivity and networks will be a key consideration along with invasive species - particularly those listed on the Third Schedule to the European Communities (Birds and Natural Habitats) Regulations 2011 [S.I.477/2011].
Other sites of high biodiversity value or ecological importance	Semi-natural habitats in National Parks and Wildlife Service (NPWS) national surveys (native woodlands, reef systems, tidal habitats, grasslands, peatlands etc.). Trees and woodlands of national importance have been identified.

The SEA made use of available data sources including those from the National Parks and Wildlife Service, the EPA's Framework National Ecological Network for Ireland and CORINE land cover mapping.

The SEA was informed by the findings of the AA and followed elements of Integrated Biodiversity Assessment with reference made to the EPA's 2013 Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual.

²⁷ [OSPAR Convention to Protect the Marine Environment of the North East Atlantic, Ireland committed to establishing marine protected areas to protect biodiversity](#)

²⁸ [EPA Maps](#)

²⁹ [Nature Reserves in Ireland | National Parks & Wildlife Service \(npws.ie\)](#)



As well as considerations related to European sites - a focus was placed on protected species outside of these designations such as bats³⁰, breeding birds³¹, badgers³² etc. as well as all related species listed within the Flora (Protection) Order, 2022 (S.I. No. 235 of 2022)³³.

4.3.2 Key Issues Related to the LACAP

The key considerations in relation to Biodiversity, Flora and Fauna were as follows:

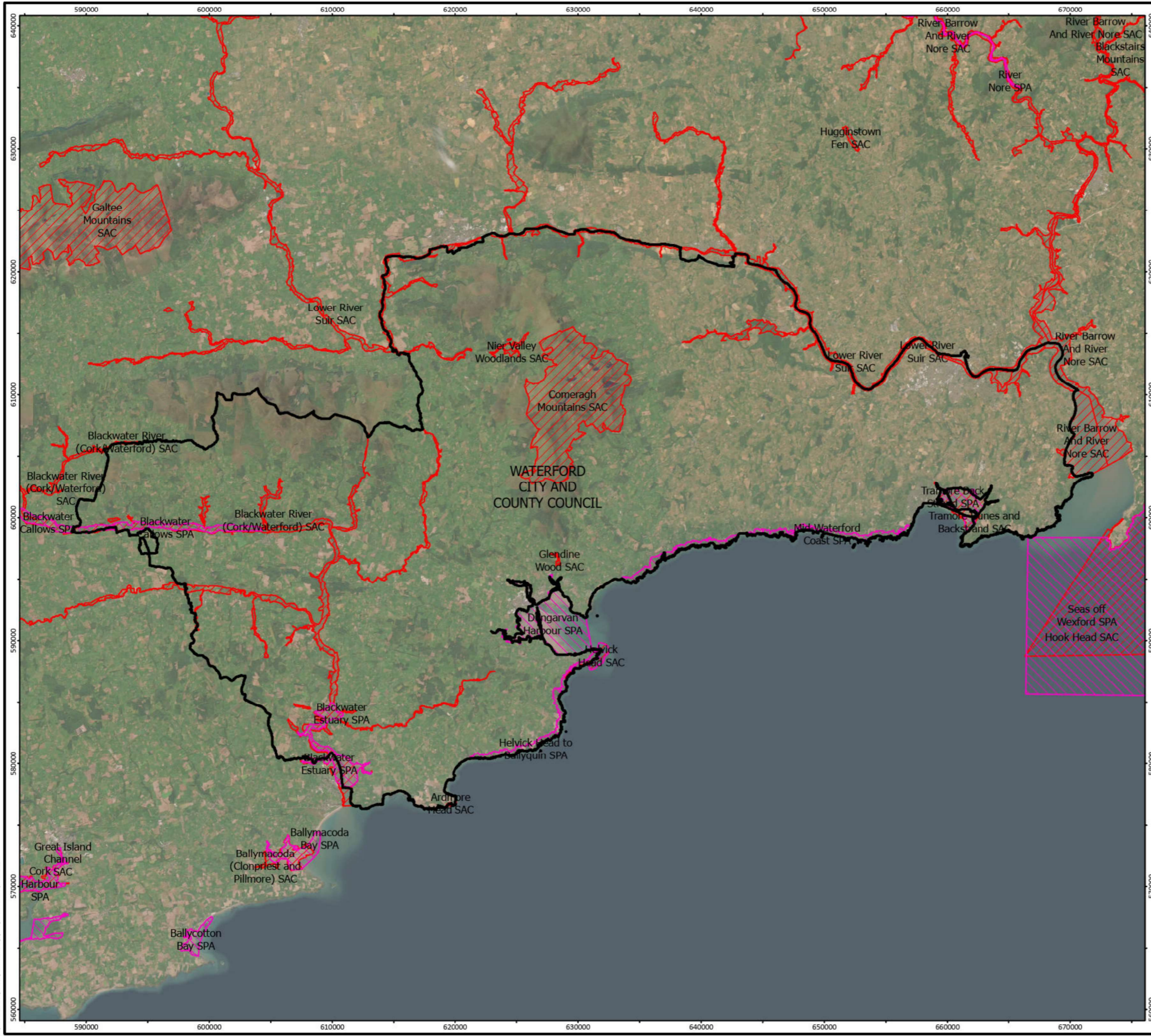
- Route selection and classification criteria are a key consideration in the development of blueways and greenways within the LACAP due to the largely linear nature of these developments,
- The potential for effects on non-designated biodiversity features e.g. important habitats and species outside designated sites - particularly with regard to fragmentation, barriers to movement and displacement,
- The potential for effects on protected areas: National and European sites (e.g. SAC, SPAs, RAMSAR), National sites (e.g. NHAs) and other Natural Heritage Sites and Conservation Interest Sites e.g. refuge for fauna or flora, wildfowl reserves,
- The potential to spread invasive species, and
- Potential for biodiversity enhancement.

³⁰ The Habitats Directive ([1992/43/EEC](#)) and Birds Directive ([2009/147/EEC](#)) provides legal protection for habitats and species of European importance. The overall aim of the Habitat and Birds Directives are to maintain or restore the “favourable conservation status” of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable among them. These two designations are collectively known and referred to as European sites. Articles 6(3) and 6(4) of the Habitats Directives set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended). Further to the requirements of considerations related to European sites protected Annex IV of the Habitats Directive identifies priority species which are afforded protection in their own right - these include all Irish species of bats. Bats are also protected under the Irish Wildlife Acts, 1976 and 2000.

³¹ Irish Wildlife Acts, 1976 (as amended)

³² Irish Wildlife Act 1976 (as amended) and Bern Convention Appendix III

³³ Which gives legal protection to 68 species of vascular plants 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). The current list of plant species protected by Section 21 of the Wildlife Acts is set out in the Flora (Protection) Order, 1999 (as amended).



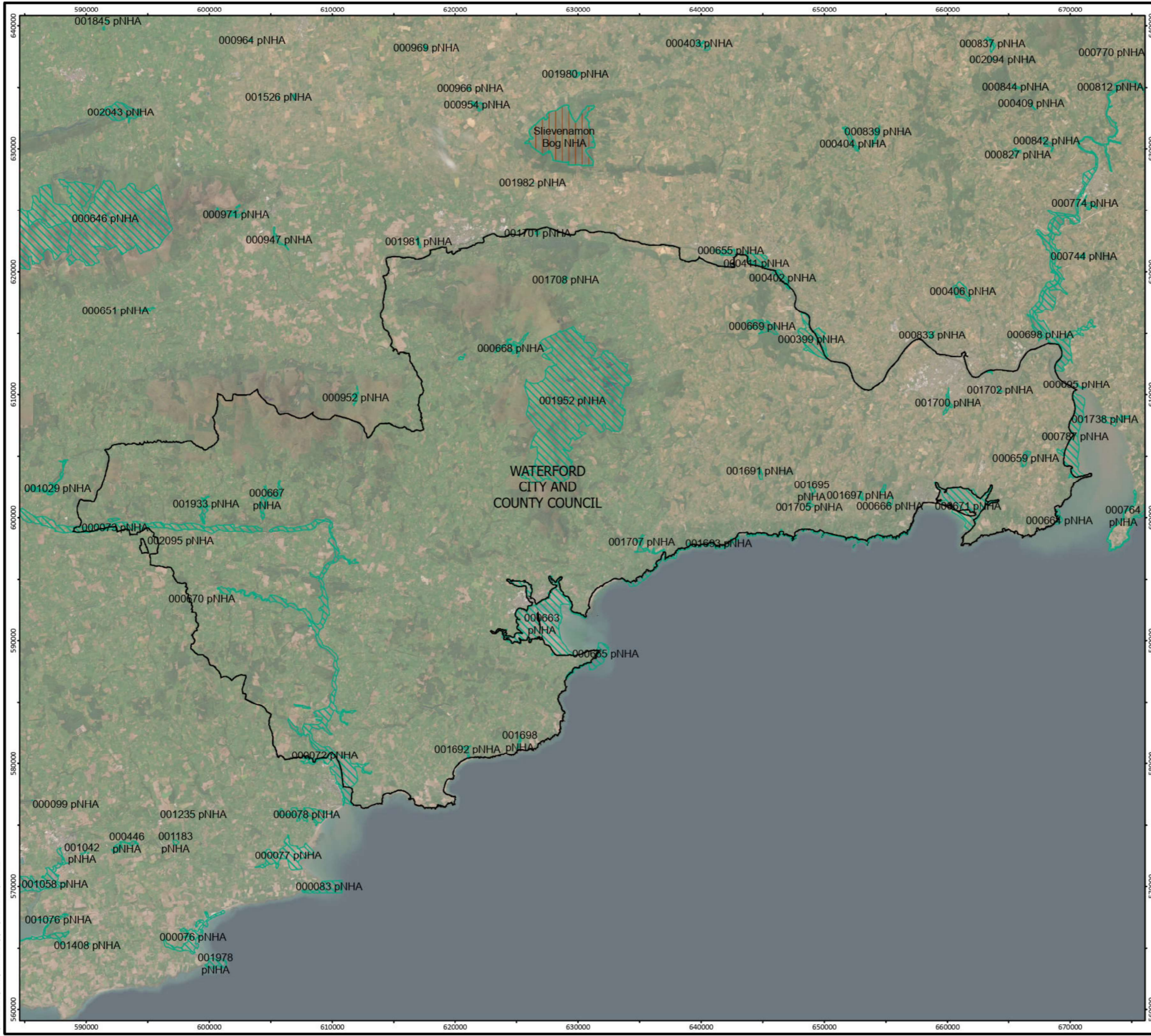
- Legend**
- Local Authority Boundaries
 - Special Protection Areas
 - Special Area of Conservation

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Special Areas of Conservation and Special Protected Areas	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.3
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
DATE:	23/01/2024
SCALE:	1:305,000 @ A3




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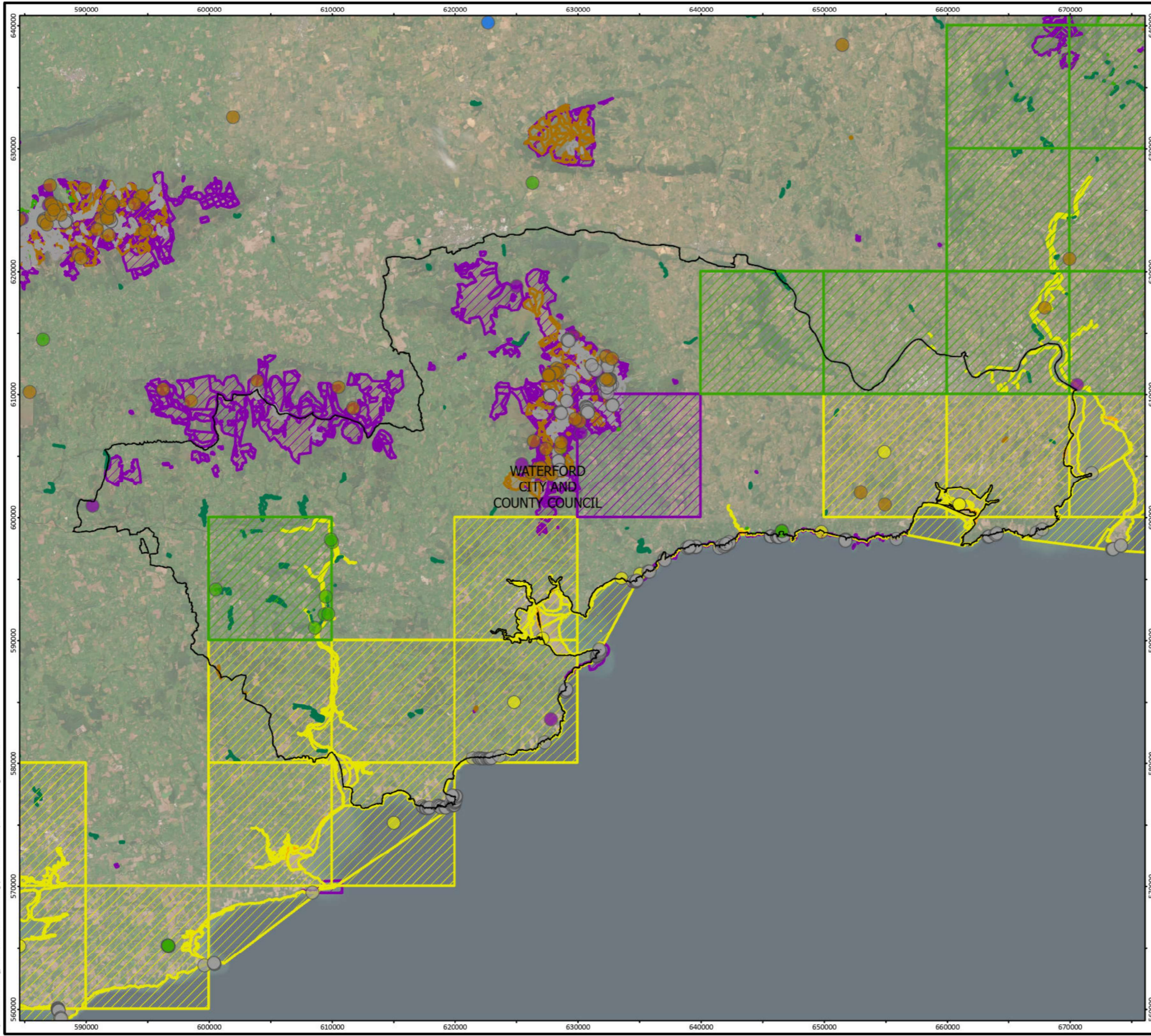
Legend

-  Local Authority Boundaries
-  Natural Heritage Areas
-  Proposed Natural Heritage Areas

Natural Heritage Areas and proposed Natural Heritage Areas in Ireland	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.4
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
DATE: 23/01/2024	SCALE: 1:305,000 @ A3
	

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 News/Articles/Mapdata/terrestrial: National Parks and Wildlife Service of Ireland (NPWS), An tSeibhín nárcóimnis Naisiúnta agus Fíadhlúis
 Department of Housing, Local Government and Heritage: An Bunán Tíre, Baile Ádhúil agus Oidhreacht



- Legend**
- Local Authority Boundaries
 - Article17HabitatsDetailedDistributionPointGDPR**
 - Bogs, Mires and Fens
 - Coastal
 - Grasslands
 - Heath and Scrub
 - Rocky
 - Article17HabitatDetailedDistributionPolylineGDPR**
 - Coastal
 - Article17HabitatsDetailedDistributionPolygonGDPR**
 - Bogs, Mires and Fens
 - Coastal
 - Dunes
 - Forests
 - Grasslands
 - Heath and Scrub
 - Rocky

Potential Habitat Sensitivities - Areas likely to contain Annex I habitats

WATERFORD CITY AND COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.5

CLIENT: WATERFORD CITY AND COUNTY COUNCIL

DATE: 23/01/2024 **SCALE:** 1:305,000 @ A3



4.4 Landscape, Seascape & Visual Amenity

4.4.1 Characterisation of the Environmental Baseline

Waterford has a very diverse landscape including uplands, waterway corridors, demesne and coastal landscapes. Mountain regions, including the Comeragh Mountains, are found mainly in the north-west and centre of the County, and several south-flowing river systems, including the Suir, the Blackwater and the Bride, and a rugged coastline with many coves and beaches in the east and south-east of the County. The east of the County is low lying and has a concentration of lakes and wetlands.

The current Landscape and Seascape Character Assessment³⁴ for Waterford identifies seven landscape character types. These character types consist of: Coastal Landscapes (Lower Waterford Estuary, Tramore Bay, Copper Coast East and Copper Coast West, Dungarvan, Helvic Head, and Ardmore Head); Farmed Lowland Landscapes (Rathgormack Lowlands, Kilmacthomas Lowlands, East Waterford Lowlands, Clashmore and Newport Lowlands, Blackwater and Bride Lowlands, Kinsalebeg); River Corridor Landscapes (Blackwater and Bride River Corridor, Suir River Corridor); Estuaries (Blackwater and Suir Estuaries); Foothill Landscapes (Knockaturnory Munsboro, Ballymacarbry/Nire Valley, Tooraneena Foothills, Knockmealdown Foothills, Drumhills, Glendine); Upland Landscapes (Comeragh and Knockmealdown Mountains); and Ubranising Landscapes (Waterford City, Tramore, and Dungarvan Environs).

The above and any other or emerging landscape designations were considered by the assessment.

The SEA assessment of landscape utilised information from the following sources:

- Waterford environmental sensitivity mapping,
- The National Landscape Strategy for Ireland,
- Tree Preservation Orders,
- Forest cover/Indicative Forest Strategies³⁵,
- City and County Development Plan, and
- County Landscape Character Assessments.

4.4.2 Key Issues Relating to the LACAP

The key issues in relation to Landscape, Seascape and Visual Amenity were as follows:

- Effects of green infrastructure (i.e. blueways, greenways) and renewable energy farm developments on areas of designated landscape quality and scenic views etc., and
- Sensitivity of the landscape to change from green infrastructure development.

³⁴ Waterford City and County Development Plan 2022-2028, *Appendix 8: Landscape and Seascape Character Assessment*

³⁵ Department of Agriculture, Food and the Marine



4.5 Cultural Heritage - Archaeology & Architectural

4.5.1 Characterisation of the Environmental Baseline

Archaeological sites are legally protected³⁶. The SEA Environmental Report included information on the archaeological heritage of Waterford. One of the primary sources of information for known archaeological features is the Record of Monuments and Places (RMP)³⁷. The RMP is an inventory of sites and areas of archaeological significance.

There are hundreds of Recorded Monuments within the County area. Clusters of monuments are concentrated within and adjacent to the existing built-up footprint of the County and in the rural areas. Graveyards, castles, forts, crosses and churches are amongst the most common recorded monuments in the Plan area. There are 12 recorded monuments on the RMP in State Care in the Plan area. The locations of the known archaeological sites are detailed in Figure 4-6.

The SEA Environmental Report also included information on the architectural heritage of Waterford including that relating to designations such as the Record of Protected Structures (RPS). Local authorities compile and maintain the RPSs³⁸; these RPSs are listed in the City and County Development Plans but are not available in digital map format for some County Councils. There are close to 3,000 entries to the Record of Protected Structures within the Plan area³⁹, which include many notable buildings in the County such as: the Lismore Castle; Ardmore Head Watchtower; Curraghmore House; Cappoquin House; and Dromana House.

It is acknowledged that the register of protected structures documented in CDPs may not represent all Ministerial recommended sites/structures which are included in the National Inventory of Architectural Heritage (NIAH)⁴⁰. The purpose of the NIAH is to identify, record, and evaluate the post-1700 heritage of Ireland and there are over 50,000 listings on the NIAH in Ireland (DAHRRG, 2022). These provisions include historic gardens, designed landscapes and underwater archaeological heritage⁴¹.

The Department of Housing, Local Government and Heritage has developed the Heritage Ireland 2030⁴² plan, published in February 2022, serving the purpose of informing decision-making process. An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape designated for its special characteristics and distinctive features. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are various ACAs designated within the Plan area. ACAs are currently designated in Dungarvan, Waterford City (Trinity), and Waterford City (South Quay). There are also several ACAs proposed for designation in several areas within the County, such as AGLISH, the copper Coast, Passage East, and Kilmacthomas.

³⁶ National Monuments Acts 1930 (as amended), the National Cultural Institutions Act 1997 (as amended) and the Planning and Development Act 2000 (as amended)

³⁷ Data available at [National Monuments Service - Archaeological Survey of Ireland - Datasets - data.gov.ie](https://data.gov.ie/datasets/national-monuments-service-archaeological-survey-of-ireland)

³⁸ Under Section 51 of the Planning & Development Act 2000 (as amended).

³⁹ *Waterford City and County Development Plan 2022-2028*

⁴⁰ Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 (as amended) Data available at [National Inventory of Architectural Heritage \(NIAH\) National Dataset - Datasets - data.gov.ie](https://data.gov.ie/datasets/national-inventory-of-architectural-heritage-niah-national-dataset)

⁴¹ Department of Housing, Local Government and Heritage. 2015. Advice to the Public on Ireland's Underwater Archaeological Heritage

⁴² Available at [Heritage Ireland 2030 | gov.ie/housing \(www.gov.ie\)](https://www.gov.ie/housing)



The SEA assessment of Cultural Heritage - Archaeological and Architectural utilised information from the following sources:

- The Department of Arts, Heritage Regional, Rural and Gaeltacht Affairs⁴³ (including underwater archaeology such as wreck data⁴⁴),
- National Monuments Service (including the Underwater Unit),
- Built Heritage and Architectural Policy Section (the NIAH)⁴⁵,
- City and County Development Plan,
- Heritage Council, and
- United Nations Educational, Scientific, and Cultural Organisation (UNESCO).

4.5.2 Key Issues Relating to the LACAP

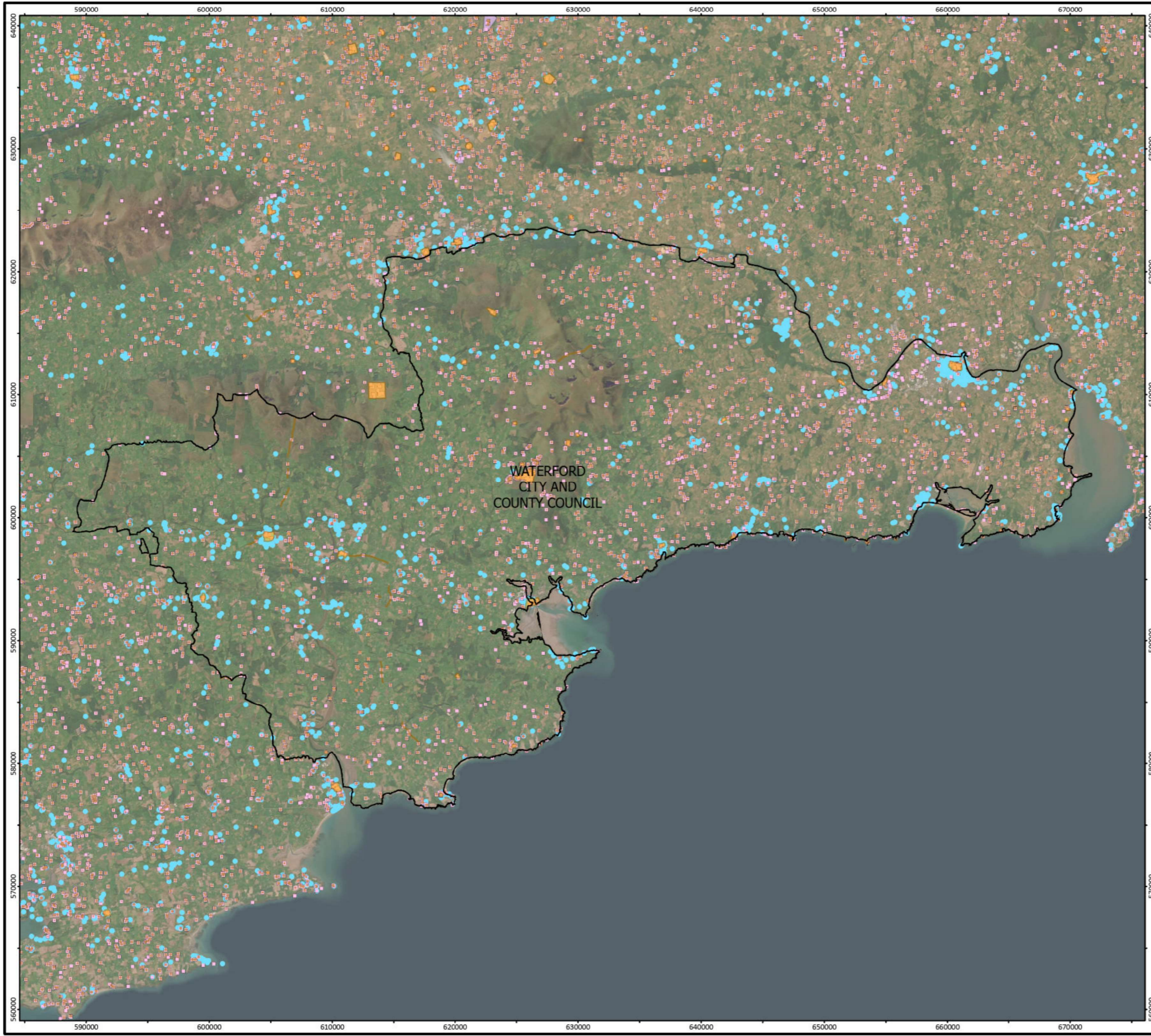
The key issues in relation to Cultural Heritage were as follows:






- The potential impact of the development of energy projects and green infrastructure on archaeological and architectural heritage, and
- No existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

⁴³ Department of Arts, Heritage and the Gaeltacht

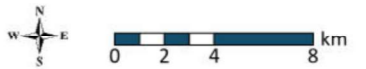
⁴⁴ Available at [Wreck Viewer | National Monuments Service \(archaeology.ie\)](https://www.archaeology.ie/wreck-viewer)

⁴⁵ Data available at [National Inventory of Architectural Heritage \(NIAH\) National Dataset - Datasets - data.gov.ie](https://data.gov.ie/dataset/national-inventory-of-architectural-heritage)



- Legend**
-  Local Authority Boundaries
 -  National Inventory of Architectural Heritage (NIAH)
 -  National Monuments Service
 -  SMR Zones
 -  National Monuments Service - Zones of Notification

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Archaeological Heritage and National Monuments Map	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.6
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3
	





4.6 Soils

4.6.1 Characterisation of the Environmental Baseline

The types of soils found covering the County⁴⁶ include the following:

Table 4-3: Soil Types Covering the County

Soil Type	Description
Dominant Soils	
Brown Earths	Brown earths are well drained mineral soils, associated with high levels of natural fertility. These are found mainly in the north east, east, south, and south-west of the County. .
Brown Podzolics	Brown podzolic soils are characterised by dark brown humus-mineral soil covered with a thin mat of partly decayed leaves. These are mainly in the east of the County.
Other Soils	
Peat	Peatlands are acidic soils which in their undrained state have a high water content. They also have an extremely high organic content and low ash (i.e. inorganic) content. These are found in mainly in the mid- and north west of the county, near the border with Kilkenny.
Alluvial soils	These are associated with alluvial (clay, silt or sand) river deposits. These are found in the flood plains of rivers and streams
Luvisols	Luvisol soils are generally fertile, widely used for agriculture and associated with significant accumulation of clay. A concentration of Luvisols can be found in the south of the County.
Urban soils	Urban soils are soils which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas. These soils are found mainly in the built-up parts of the Plan area.

Peatlands are unique systems comprising of peat soil providing as significant carbon stores and supporting a range of unique species. Active blanket bogs and active raised bogs are considered to be priority habitats, listed on Annex I of the EU Habitats Directive. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues. Concentrations of peat bogs occur mainly in the north-west and central parts of the County. Most of the peatlands found in County Waterford are mountain blanket bogs. The best developed areas of this type of habitat occur around the Comeragh Mountains.

The SEA examined issues including the loss of soils/soil sealing, as a result of greenfield development, and interactions with biodiversity and carbon storage, such as those that can occur as a result of development in peatland areas.

⁴⁶ Teagasc.ie. General Soil Map.



The audit of County Geological Sites in Waterford was completed in 2012 and identified 55 County Geological Sites⁴⁷. Previous Landslide Events and Landslide Susceptibility Mapping sources were considered by the SEA.

The SEA of Soils utilised information from the following sources:

- GSI,
- Teagasc,
- Infomar⁴⁸, and
- EPA.

There is no legislation solely directed to soil protection in Ireland. In 2006, the European Commission (EC) developed a Soil Thematic Strategy that aims to protect soils and ensure the sustainable use of soils across Europe. Although a proposal for a Soil Framework Directive was withdrawn in 2014, the importance of sustainable soil management was recognised in the Seventh Environment Action Programme, where sustainable land management is to be achieved by 2020.

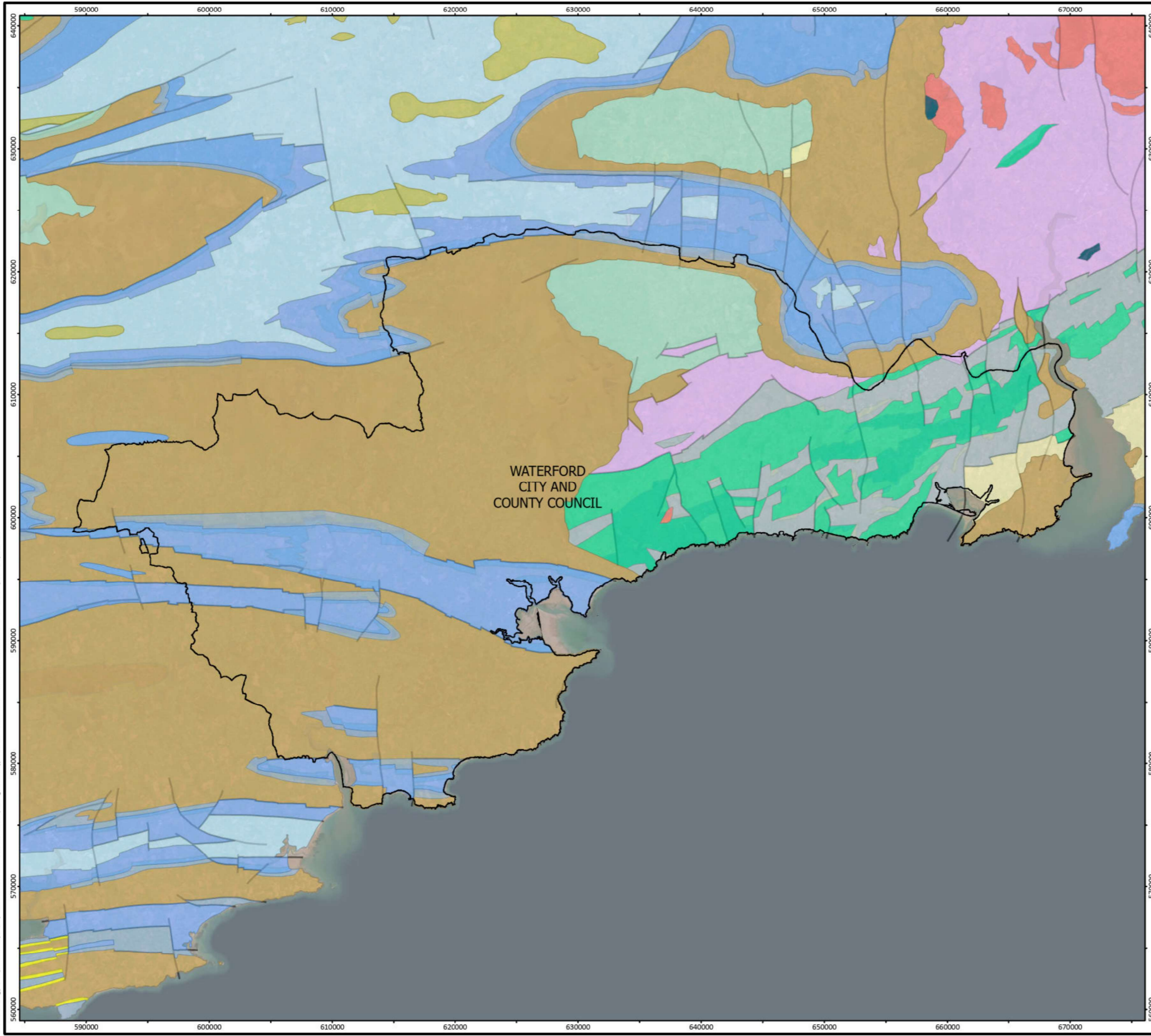
4.6.2 Key Issues Relating to the LACAP

The key issues in relation to Soils were as follows:

- Potential for impacts on soil resources and offshore sediment transport,
- Potential impacts to soils (land) vulnerable to erosion, and
- Potential for unearthing contaminated material.

⁴⁷ Geological Survey of Ireland (2012) *The Geological Heritage of Waterford*.

⁴⁸ [Seabed and Sediment Data | Infomar](#)



- Legend**
- Local Authority Boundaries
 - SI Ireland Bedrock Geological Units 1:1,000,000
 - Geological Unit Name
 - Ir Paleozoic basic-intermediate intrusion
 - Slurp-Devonian granitic rocks & apatite
 - Cambrian greywacke, slate, quartzite
 - Ordovician volcanic rocks
 - Lower-Ordovician Ordovician slate, sandstone, greywacke, conglomerate
 - Middle-Upper Ordovician slate, sandstone, greywacke, conglomerate
 - Sluirlan deep marine mudstone, greywacke & conglomerate
 - Devonian volcanic rocks
 - ORS, sandstone, conglomerate & mudstone
 - Up, Devonian sandstone & mudstone (Old Head Sandstone Fm)
 - Tournaisian sandstone, mudstone, limestone
 - Tournaisian limestone
 - Visean limestone & calcareous shale
 - Namurian shale, sandstone, siltstone & coal
 - Faults 500k (KO/NI)
 - Bedrock Geology 500k (KO/NI)
 - 5, Gabbro, dolerite & diorite
 - 6, Microgranite & porphyry
 - 31, Marine, Slate
 - 32, Marine, Greywacke & shale
 - 35, Deep marine, Slate, schist & minor greywacke
 - 37, Basalt - andesite, tuff, slate & mudstone
 - 38, Rhyolite, rhyolitic tuff & slate
 - 39, Deep marine, Slate, shale, minor sandstone & siltstone
 - 49, Deep marine turbidite sequence; Mudstone, greywacke & conglomerate
 - 53, Continental redbed facies; Sandstone, siltstone & mudstone
 - 54, Continental redbed facies; Sandstone, conglomerate & siltstone (in places extends into the Carboniferous)
 - 57, Marine (Cork Group) (extends into the Visean); Mudstone, sandstone & thin limestone
 - 58, Shallow marine ("Lower limestone Shale"); Shale, sandstone & thin limestone
 - 61, Marine shelf & ramp facies; Argillaceous dark-grey bioclastic limestone, subsidiary shale
 - 62, Visulorlian mudbank; Pale-grey massive limestone
 - 64, Marine shelf facies; Limestone & calcareous shale
 - 71, Fluvio-deltaic & basinal marine (Turbiditic); Shale, sandstone, siltstone & coal

Bedrock Geology

WATERFORD CITY AND COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.7

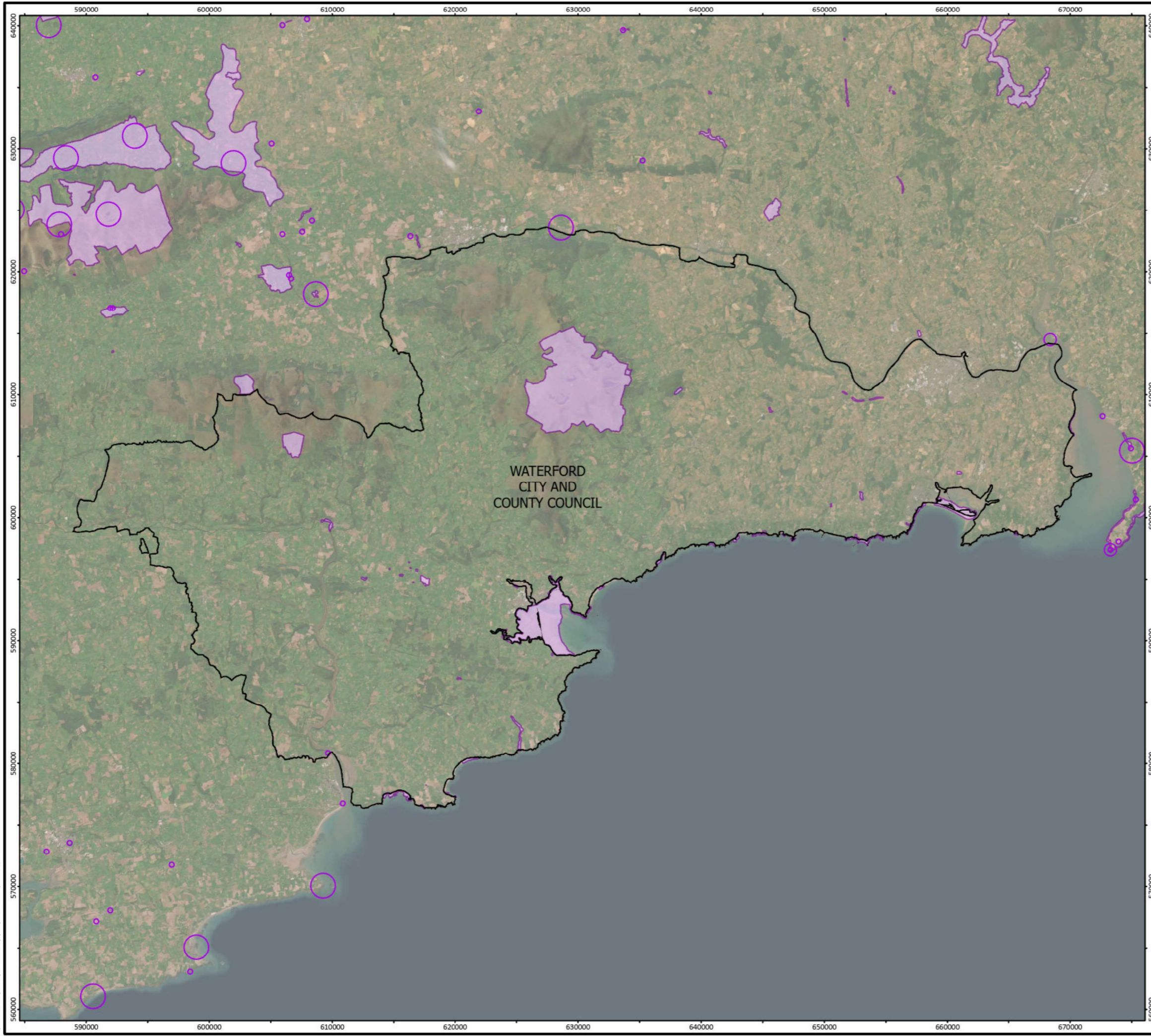
CLIENT: WATERFORD CITY AND COUNTY COUNCIL

DATE: 23/01/2024 **SCALE:** 1:305,000 @ A3



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 Bedrock Geology: 1:500,000 Ireland (KO/NI) (TM) Contains Irish Public Sector Data (Geological Survey) licensed under a Creative Commons Attribution 4.0 International [CC BY 4.0] Licence
 Path: R:\Map Production\2023\123-076\Workspaces\SEA\SEA_ER_Fig_4-7_Geology of Ireland.aprx

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Legend

- Local Authority Boundaries
- Geological Heritage Sites (Audited Boundaries)
- Geological Heritage Sites (Unaudited Boundaries)

Geological Heritage Sites	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.8
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3

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4.7 Land Use

4.7.1 Characterisation of the Environmental Baseline

Information on land use in Waterford can be obtained from the CORINE Land Cover (CLC) inventory and Ireland's Marine Atlas⁴⁹. These data sources have archives which document land use change as well as existing land use.

The CORINE database is the dominant land use database; however, some sectors have additional spatial data resources such as forestry. The Forestry Service have produced a GIS based Forest Inventory Planning System (FIPS) to act as an aid in the long-term spatial planning of national forest, and to provide guidance to forestry grants. Additional sources of further land use data include the NPWS⁵⁰.

The SEA process considered land use impacts - utilising data from sources such as:

- CORINE Land Cover Database
- Teagasc
- EPA
- NPWS
- Forest Service
- Marine Institute
- Sea Fisheries Protection Authority (SFPA)
- GSI data

4.7.2 Key Issues Relating to the LACAP

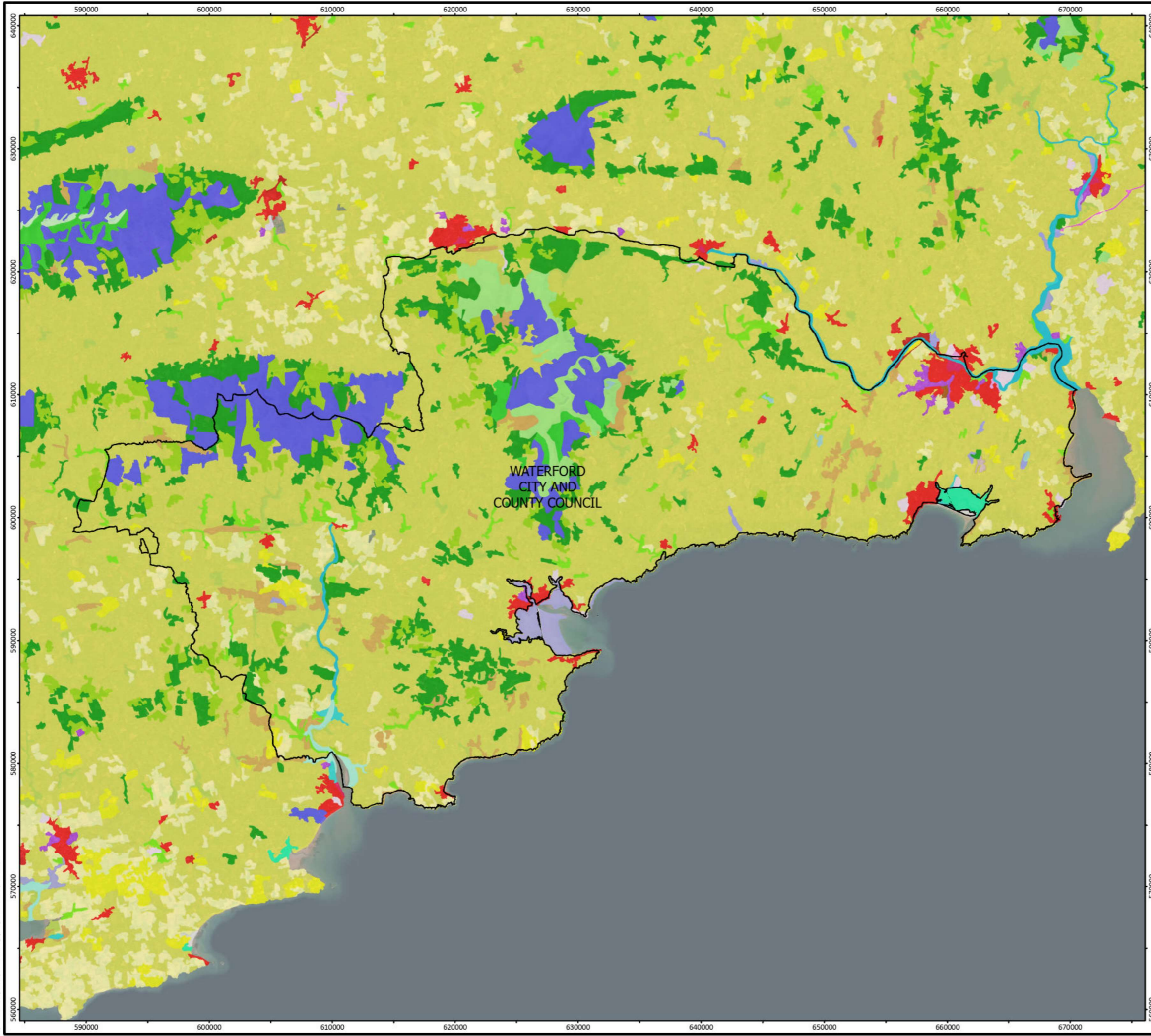
The key issues in relation to land use were as follows:

- Potential constraints on sectors such as agricultural, forestry and fisheries, primarily related to construction and operation of infrastructure projects (i.e. solar farms, blueways) associated with the LACAP.

⁴⁹ Available at [Ireland's Marine Atlas](#)

⁵⁰ Sources such as the Lesser Horseshoe Bat Species Action Plan 2022-2026, Draft National Peatland Strategy, Draft Raised Bog SAC Management Plan, and Draft Raised Bog NHAs Review.

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World Imagery: Earthstar geographics
Construction: © OpenStreetMap (and) contributors, CC-BY-SA
Path: R:\Map Production\2023\123-076\Workspaces\SEA\SEA_ER_Fig_4-9 Land Use of Ireland.aprx



- Legend
- Local Authority Boundaries
 - CORINE Land Cover 2018
 - 111 Continuous urban fabric
 - 112 Discontinuous urban fabric
 - 121 Industrial or commercial units
 - 122 Road and rail networks
 - 124 Airports
 - 131 Mineral extraction sites
 - 132 Dump
 - 133 Construction sites
 - 141 Green urban sites
 - 142 Sport and leisure facilities
 - 211 Non-irrigated land
 - 231 Pastures
 - 242 Complex cultivation patterns
 - 243 Land principally occupied by agriculture with areas of natural vegetation
 - 311 Broad-leaved forest
 - 312 Coniferous forest
 - 313 Mixed forest
 - 321 Natural grassland
 - 322 Moors and heaths
 - 324 Transitional woodland scrub
 - 331 Beaches dunes sand
 - 333 Sparsely vegetated areas
 - 411 Inland marshes
 - 412 Peat bogs
 - 421 Salt Marshes
 - 423 Intertidal flats
 - 511 Stream courses
 - 512 Water bodies
 - 521 Coastal lagoons
 - 522 Estuaries

Land Use (CORINE)	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.9
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3



4.8 Air Quality & Noise

4.8.1 Characterisation of the Environmental Baseline

The Air Quality in Ireland 2021 report prepared by the EPA identifies that:

- Air quality in Ireland is generally good, however, there are concerning localised issues that are negatively impacting the air we breathe.
- Air quality monitoring results in 2021 show that fine particulate matter (PM_{2.5}) mainly from burning solid fuels in our homes, and nitrogen dioxide (NO₂) mainly from road transport, remain the main threats to good air quality.
- EPA monitoring shows that fine particulate matter (PM_{2.5}) and nitrogen dioxide (NO₂) levels are within the current EU legal limits, however these pollutants exceed the World Health Organization (WHO) (2021) guidelines⁵¹.

The National Clean Air Strategy (DECC, 2023) referred to the most recent projections by the EPA in 2022 and states that Ireland is on track to meet the majority of EU commitments for national emissions levels by 2030, and there was only one exceedance of EU ambient air quality limit values since 2010.

Under the Clean Air for Europe Directive [Directive 2008/50/EC], EU member states must designate "Zones" for the purpose of managing air quality. For Ireland, four zones were defined in the Air Quality Standards Regulations (2011). Waterford City is designated as 'Zone C' and its surrounding rural areas are designated within 'Zone D'. The current air quality in Waterford City and the County is identified by the EPA as being of Good⁵² status.

The EEA⁵³ states that "environmental noise can be defined as unwanted or harmful outdoor sound". The EU Noise Directive (2002/49/EC) relates to the assessment and management of environmental noise⁵⁴. This Directive called for the development of strategic noise maps and action plans for major roads, railways, airports and cities. Existing noise related impacts can be seen in Figure 4-10; these were considered throughout the SEA and AA processes in the development of the LACAP.

The SEA considered Air Quality and Noise using data from the following sources:

- EPA
- WHO

⁵¹ World Health Organization. 2021. WHO global air quality guidelines: particulate matter (PM_{2.5} and PM₁₀), ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide. World Health Organization. <https://apps.who.int/iris/handle/10665/345329>. License: CC BY-NC-SA 3.0 IGO

⁵² EPA AirQuality.ie - 20/07/2023

⁵³ EEA. 2022. Noise Data Briefing. Available at: [Noise — European Environment Agency \(europa.eu\)](https://www.eea.europa.eu/en/press/news/2022/07/2022-07-20-noise-data-briefing).

⁵⁴ This was transposed into Irish national legislation via the Environmental Noise Regulations (S. I. No. 140 of 2006).



4.8.2 Key Issues Relating to the LACAP

Overall, the LACAP is likely to have positive effects on air quality due to the nature of the plan; however, there are potential issues which may arise due to the implementation. The key issues in relation to Air Quality and Noise were as follows:

- Blueway developments, particularly during the construction phase, may have a temporary negative impact on air quality and create noise pollution, and
- Renewable energy developments may have impacts on noise pollution, particularly towards sensitive receptors which are in close proximity.



Legend

Local Authority Boundaries

55-59dB
 60-64dB
 65-69dB
 70-74dB
 Greater than 75dB

Noise Round 3 Rail - Lden

55-59dB
 60-64dB
 65-69dB
 70-74dB
 Greater than 75dB

Noise Round 3 Road - Lden

55-59dB
 60-64dB
 65-69dB
 70-74dB
 Greater than 75dB

Noise Round 3 Airport - Lden

Noise Mapping Lden (Day, Evening, Night; a measurement over 24 hours)	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.10
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3

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4.9 Water

4.9.1 Characterisation of the Environmental Baseline

The EU Water Framework Directive (WFD) (2000/60/EC) establishes a framework for the protection of both surface and groundwater. Transposing legislation outlines the water protection and water management measures required in Ireland to maintain high status of waters where it exists and to prevent any deterioration in existing water status. The second cycle of the River Basin Management Plan (RBMP) ran from 2018-2021, where separate plans were devised for all eight River Basin Districts (RBDs) with the objective of achieving at least 'good' status for all waters by 2027. The third cycle of the River Basin Management Plan is currently in the process of being prepared.

Water quality data is collected by the EPA⁵⁵. The County is located within three WFD catchments: the Colligan-Mahon in the south east; the Blackwater in the west; and the Suir in the north. The Eastern Celtic Sea lies along the south eastern coast of the County. The WFD status of coastal water bodies (2016-2021) for the Eastern Celtic Sea is currently identified as being of High status, while Waterford Harbour and Youghal Bay are identified as Moderate status, and Dungarvan Harbour and Tramore Bay are of Good status.

The EU Groundwater Directive (2006/118/EC) uses a holistic approach to groundwater by addressing the relationships between groundwater, surface water and ecological receptors. Groundwater is considered by its ecological status, which is based on two assessments: chemical and quantitative status. Both of these need to be in good condition for the overall water body to be classified as good.

The WFD groundwater status (2016-2021) underlying Waterford is generally identified as being of Good status.

The WFD status of rivers and streams (2016-2021) draining Waterford ranges from high (sections of rivers and streams, including; the Tay; the Dalligan; the Araglin; the Glasha; and the Mahon), to good (sections of rivers and streams, including; the Darrigal; Licky; Nier; and Clodiagh), to moderate (sections of rivers and streams including; the Suir; Mahon; Finisk; and Ballymoat) and to poor (sections of rivers and streams including; Dawn; St. Johns; Halfway House Stream; and Brickey).

In addition, the WFD status of lakes (2016-2021) ranges from high (Counshingaun and Crottys), to good (Carrigavantry), to moderate (Knockaderry, Ballyscanlan, and Belle) to poor (Ballyshunnock).

Pressures on waterbodies that are failing to meet the WFD's overall objective of 'good' status were identified by the SEA and policy responses were recommended as necessary. The SEA also provided information on aquifer vulnerability, aquifer productivity and entries to the WFD's Registers of Protected Areas.

Certain areas across the County are at risk of flooding from various sources including groundwater, pluvial, fluvial, estuarial and coastal. There is historic evidence of flooding in various locations across the County, including: along Rivers Blackwater, Colligan, Tay, Mahon and Suir and at various locations along the coastline.

⁵⁵ [EPA Maps](#). Water.



The OPW is the lead agency tasked with the management of flood risk in the ROI. In 2022, the OPW reviewed their 2016 Flood Risk Management Plans (FRMP). The purpose of each FRMP is to outline the long-term strategy to manage flood risk in Ireland. A number of settlements were identified by the OPW in 2012 as requiring detailed assessment of flood risk (Areas for Further Assessment)⁵⁶: AGLISH, Ballyduff, Ballynacourty, Cappoquin, Checkpoint, Clashmore, Duckspool/Sallybrook, Dungarvan, Dunmore East, Greenan, Killadangan, Lismomre, Newtown, Passage East, Portlaw, Ringphuca, Tallow, Tramore, Woodstown Lower, Youghal.

A Strategic Flood Risk Assessment, as required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Circular PL 2/2014 (Department of Environment, Community and Local Government), was undertaken alongside the preparation of the County Development Plan. This document provides information of relevance to Climate Actions defined in the LACAP, including information on land use zoning, flood risk management policy and flood risk indicators in the county.

The GSI rates groundwaters according to both their productivity and vulnerability to pollution. Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The vulnerability of aquifers underlying the County are mapped on Figure 4-15. The GSI also rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. This is referred to as aquifer productivity and is mapped on Figure 4-16.

The Water assessment utilised information from the following sources:

- EPA and Marine Institute - WFD Data,
- GSI data on groundwaters, aquifers and bedrock information,
- Catchment Flood Risk Assessment and Management (CFRAM) Study and associated FRMPs (OPW, as reviewed 2022), and
- Flood Risk Assessment (FRA) Mapping⁵⁷ (OPW).

4.9.2 Key Issues Relating to the LACAP

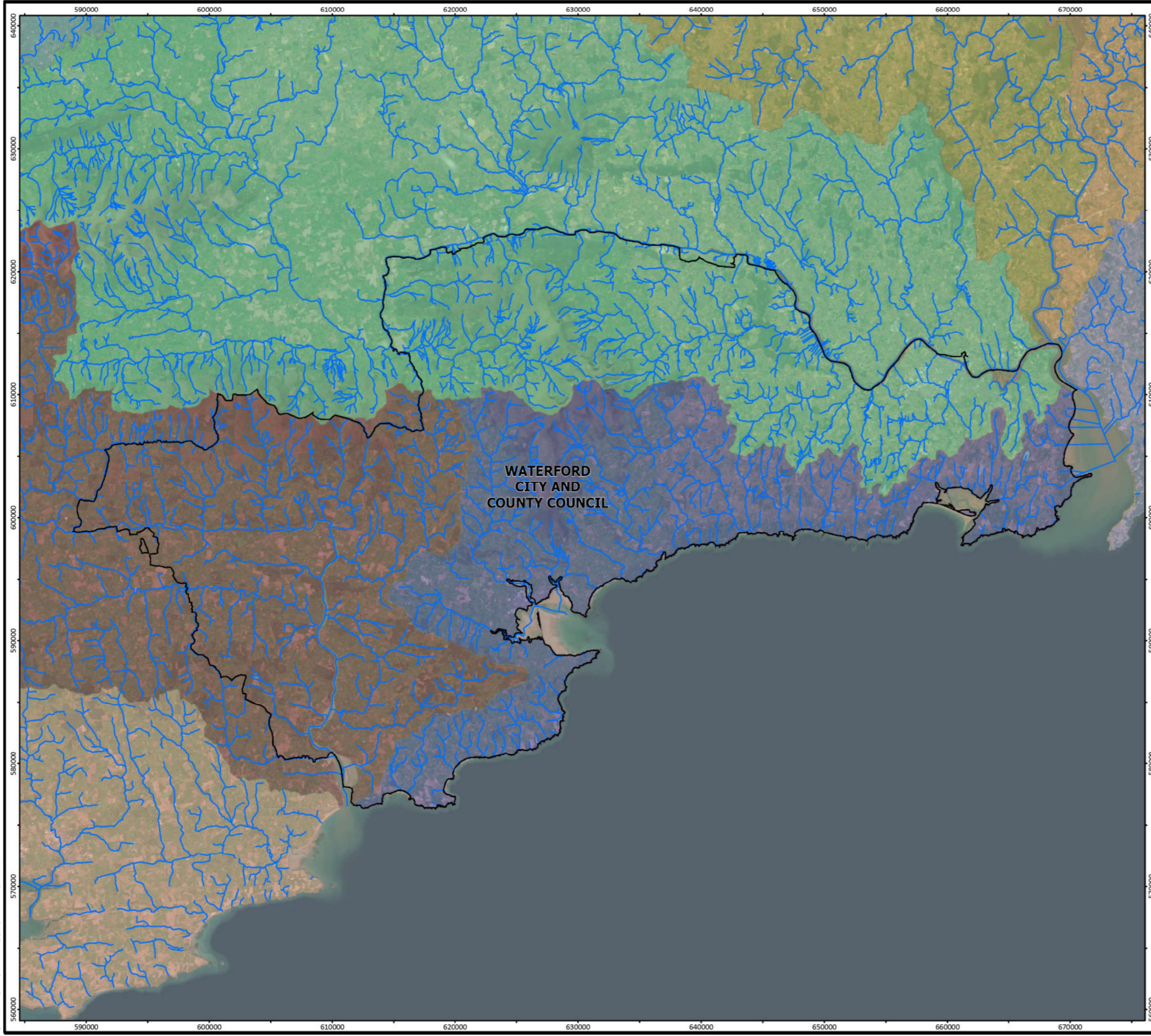
The key issues in relation to Water were as follows:

- Potential pressures and impacts on water body status from the construction of renewable energy and blueway projects i.e. increased sedimentation, groundwater recharge and accidental spillages.

⁵⁶ Available online at [Microsoft Word - PFRA Main Report - Rev D.doc](#).

⁵⁷ OPW (2022) Flood risk maps and data platform - Available at <https://www.floodinfo.ie/map/floodmaps/>

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Legend

- Local Authority Boundaries
- Rivers

WFD Catchments

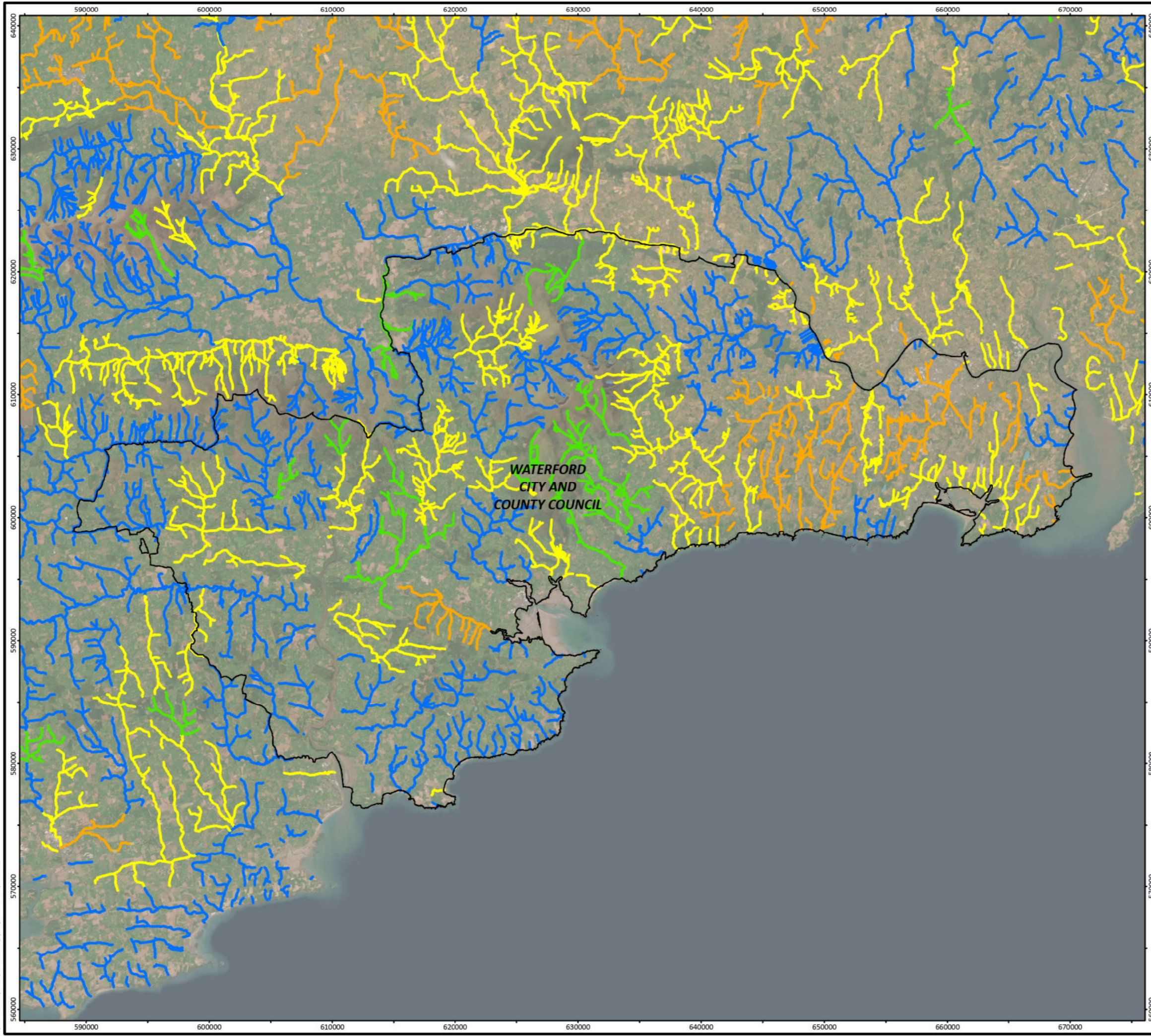
Catchment Name

- Ballyteigue-Bannow
- Barrow
- Blackwater (Munster)
- Colligan-Mahon
- Lee, Cork Harbour and Youghal Bay
- Lower Shannon
- Nore
- Suir

Hydrology	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.11
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3



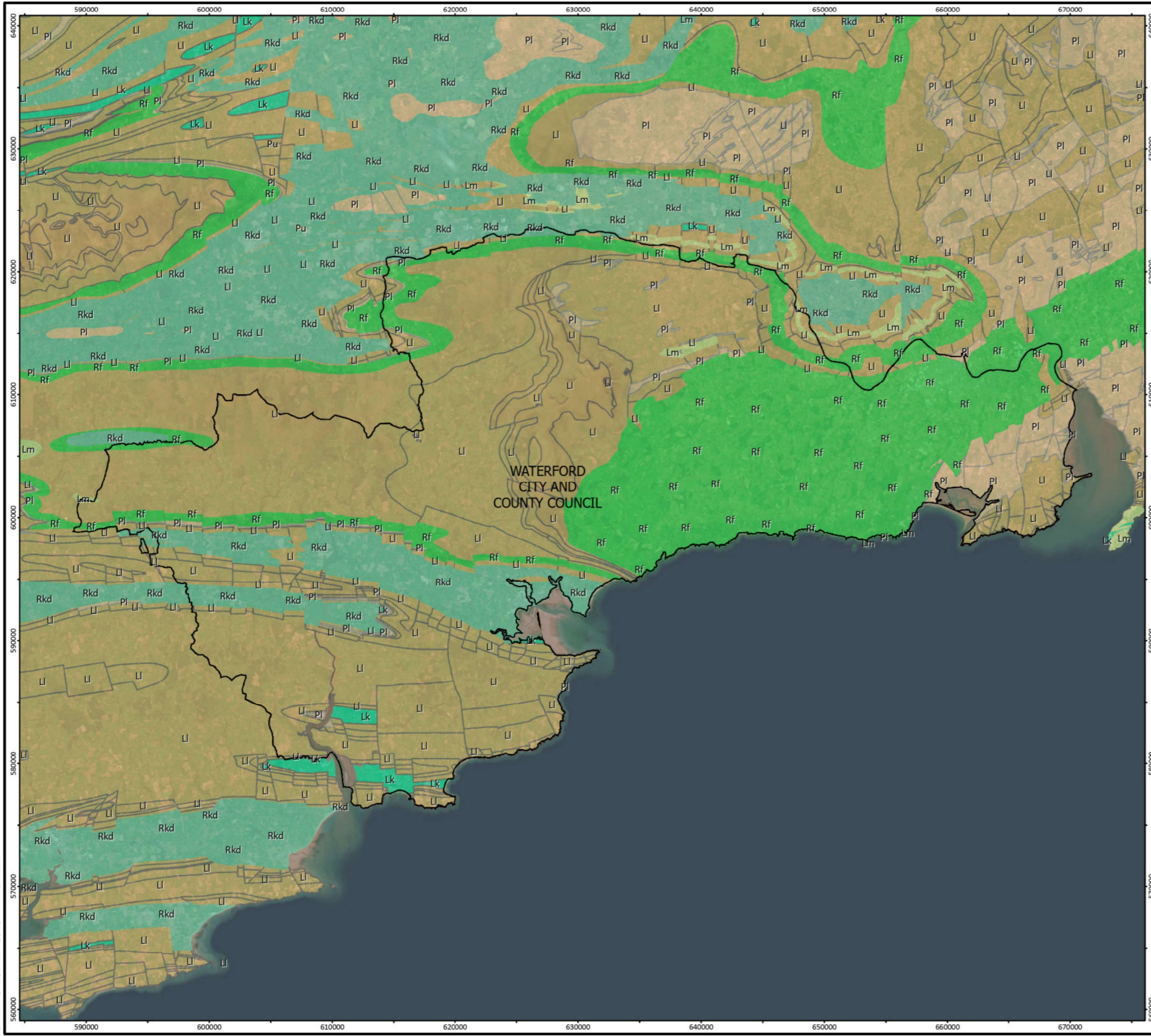
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Construction: © OpenStreetMap (and) contributors, CC-BY-SA
Path: R:\Map Production\2023\12-076\Workspaces\SEA\SEA_ER_Fig_4-12 WFD Surface Water Status.aprx



- Legend
- Local Authority Boundaries
 - WFD Lake Segments
 - EPA Rivers - WFD Status 2016 - 2021
 - Bad
 - Poor
 - Moderate
 - Good
 - High
 - Unassigned

WFD Surface Water Status	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.12
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
DATE:	23/01/2024
SCALE:	1:305,000 @ A3





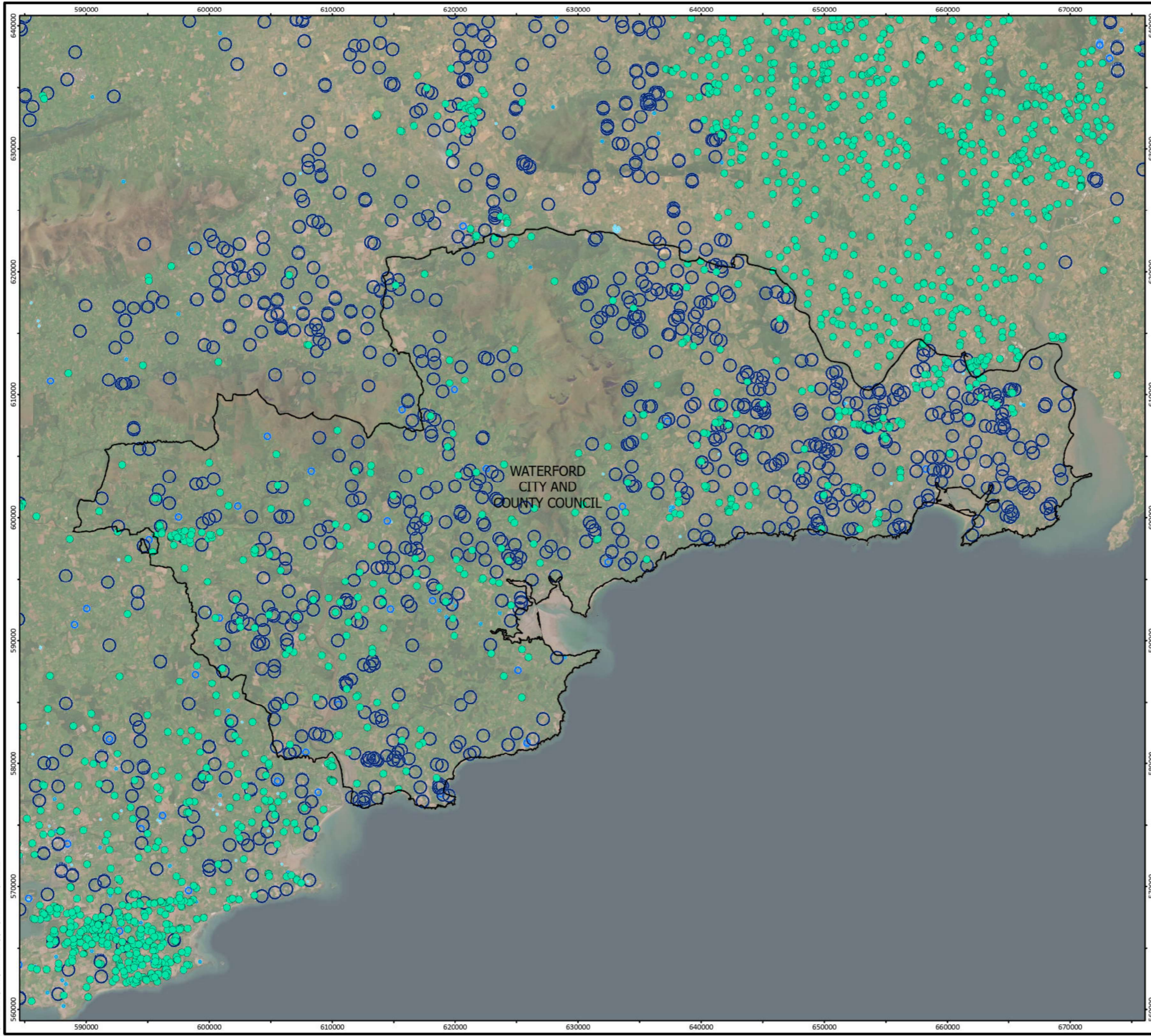
- Legend**
- Local Authority Boundaries
 - Bedrock Aquifers**
 - Lk: Locally Important Aquifer - Karstified
 - Ll: Locally Important Aquifer - Bedrock Mod Productive Locally
 - Lm: Locally Important Aquifer - Bedrock Generally Mod Productive
 - Pl: Poor Aquifer Bedrock Generally Unproductive Except Locally
 - Pu: Poor Aquifer Bedrock Generally Unproductive
 - Rf: Regionally Important Aquifer - Fissured Bedrock
 - Rkd: Regionally Important Aquifer - Karstified (diffuse)

Aquifer Classification	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.13
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
DATE: 23/01/2024	SCALE: 1:305,000 @ A3



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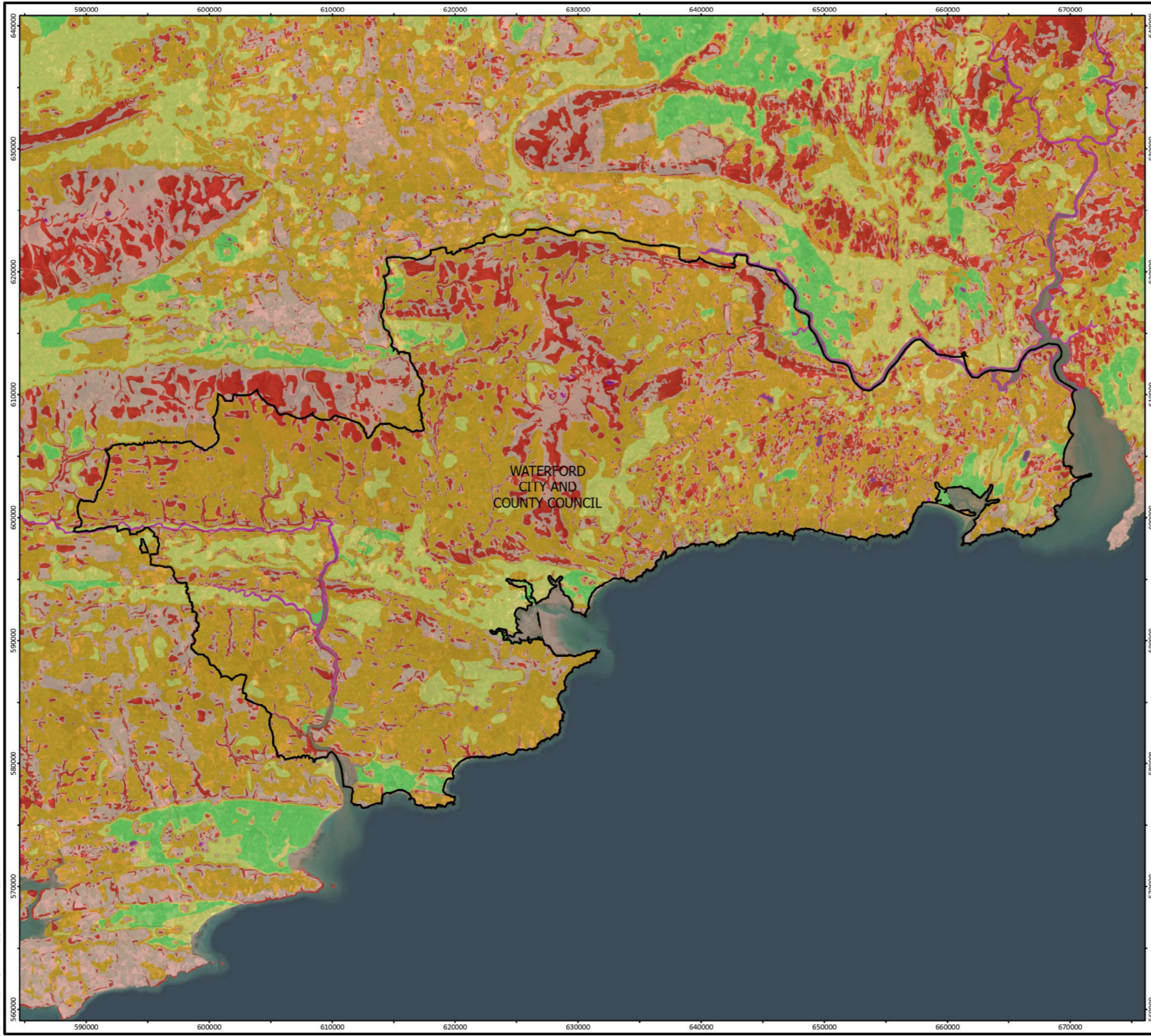


- Legend
- Local Authority Boundaries
 - Wells and Springs (10-50m Accuracy)
 - Wells and Springs (50-100m Accuracy)
 - Wells and Springs (100-200m Accuracy)
 - Wells and Springs (200-500m Accuracy)
 - Wells and Springs (500m-1km Accuracy)

Wells and Springs	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.14
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
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Path: R:\Map Production\2023\123-076\Workspaces\SEA\SEA_ER_Fig_4-15 Groundwater Vulnerability.aprx



- Legend
- Local Authority Boundaries
 - Groundwater Vulnerability
 - E - Extreme
 - H - High
 - M - Moderate
 - L - Low
 - Water
 - X - Rock Near Surface or Karst

Groundwater Vulnerability	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.15
CLIENT:	WATERFORD CITY AND COUNTY COUNCIL
DATE:	23/01/2024
SCALE:	1:305,000 @ A3



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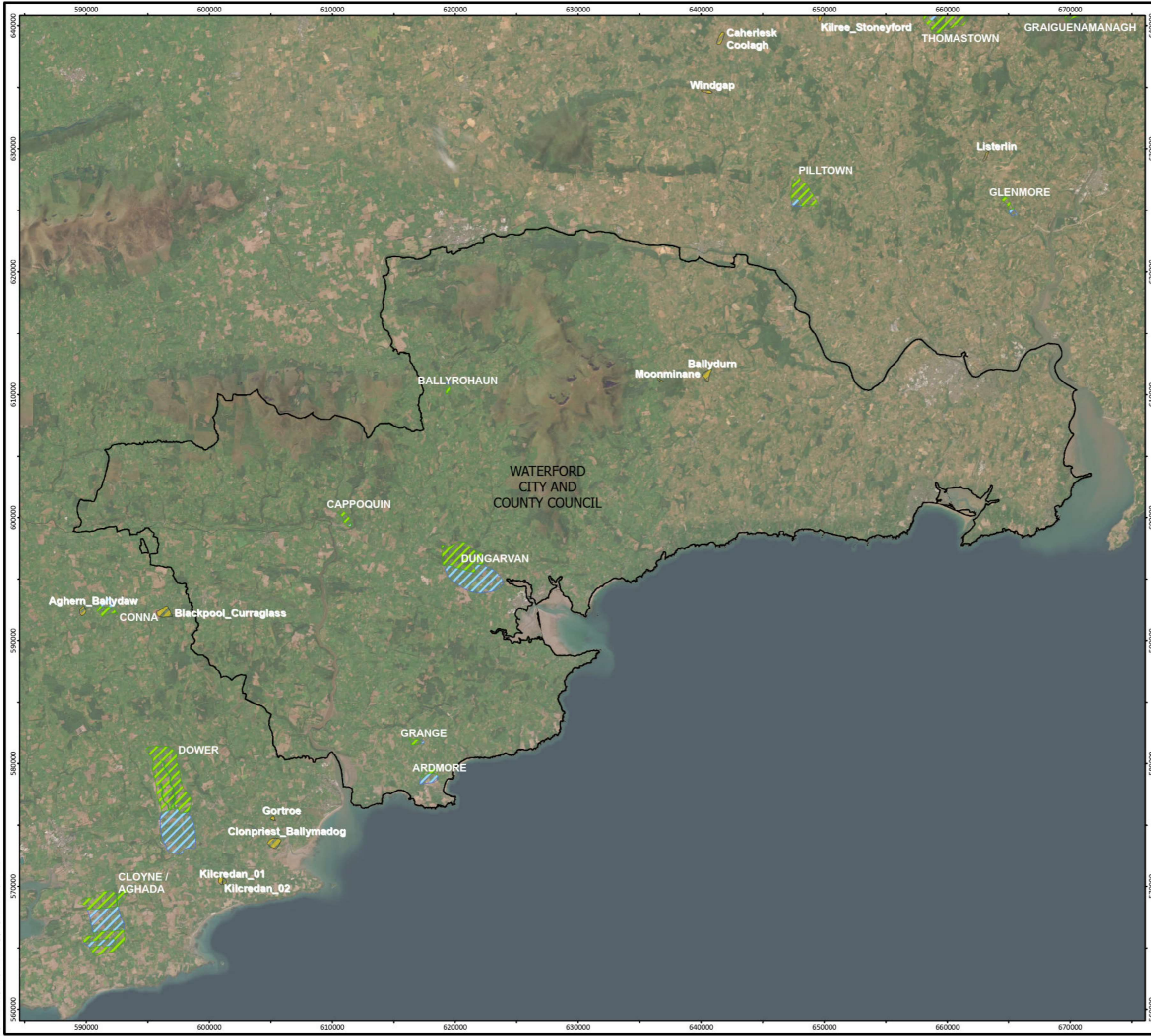


- Legend**
- Local Authority Boundaries
 - Bedrock Aquifers**
 - Ll: Locally Important Aquifer - Bedrock Mod Productive Locally
 - Lm: Locally Important Aquifer - Bedrock Generally Mod Productive
 - Pu: Poor Aquifer Bedrock Generally Unproductive

Groundwater Productivity	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.16
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3

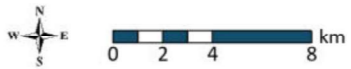


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 Path: R:\Map Production\2023\P23-076\Workspaces\SEA\SEA_ER_Fig4-17 Drinking-water Source Protection Areas.aprx



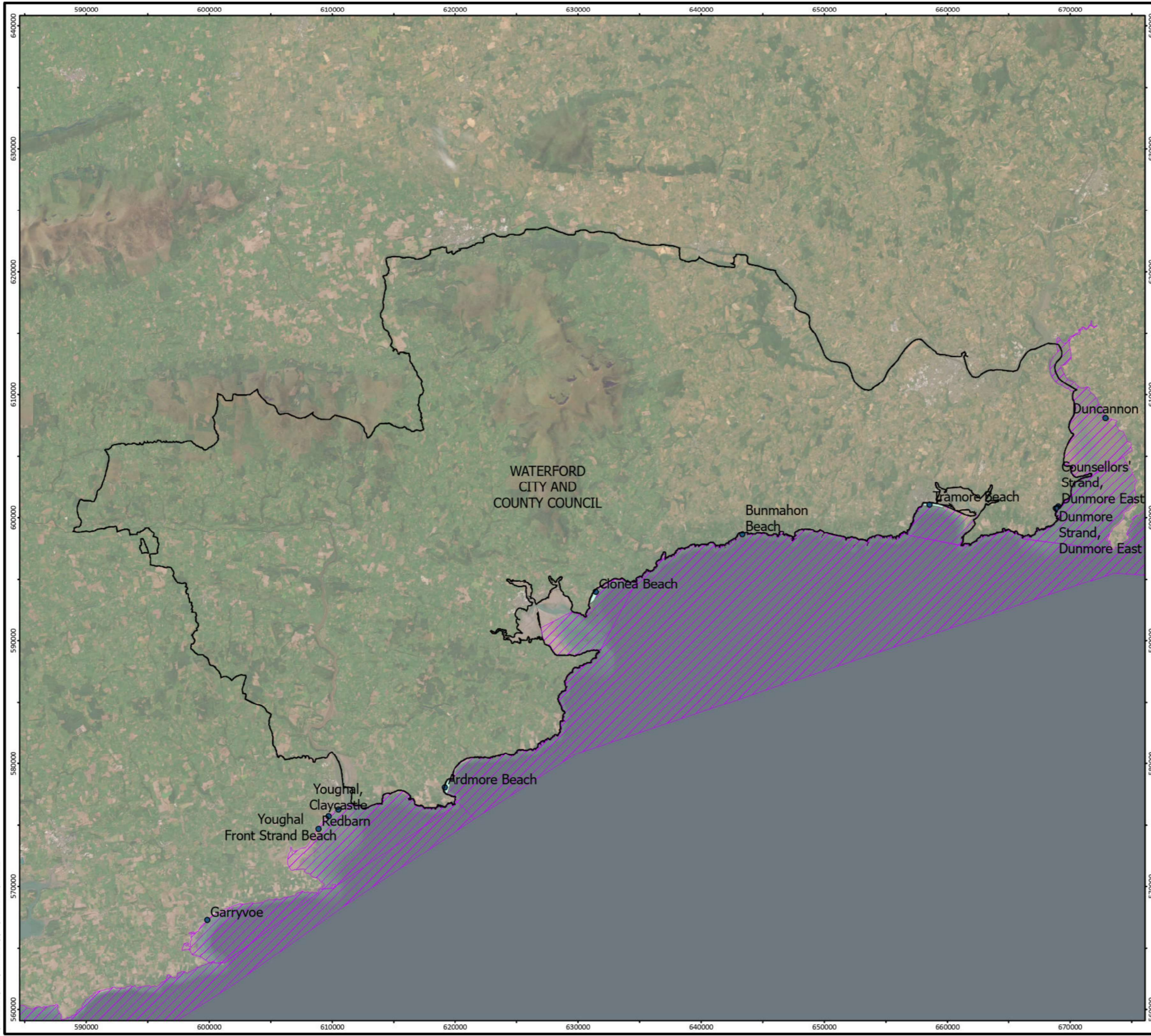
Legend

-  Local Authority Boundaries
- GSI Source Protection Areas**
 -  Source Protection Area (Inner)
 -  Source Protection Area (Outer)
 -  Group Scheme Preliminary Source Protection Areas

Drinking-water Source Protection Areas	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.17
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3
	


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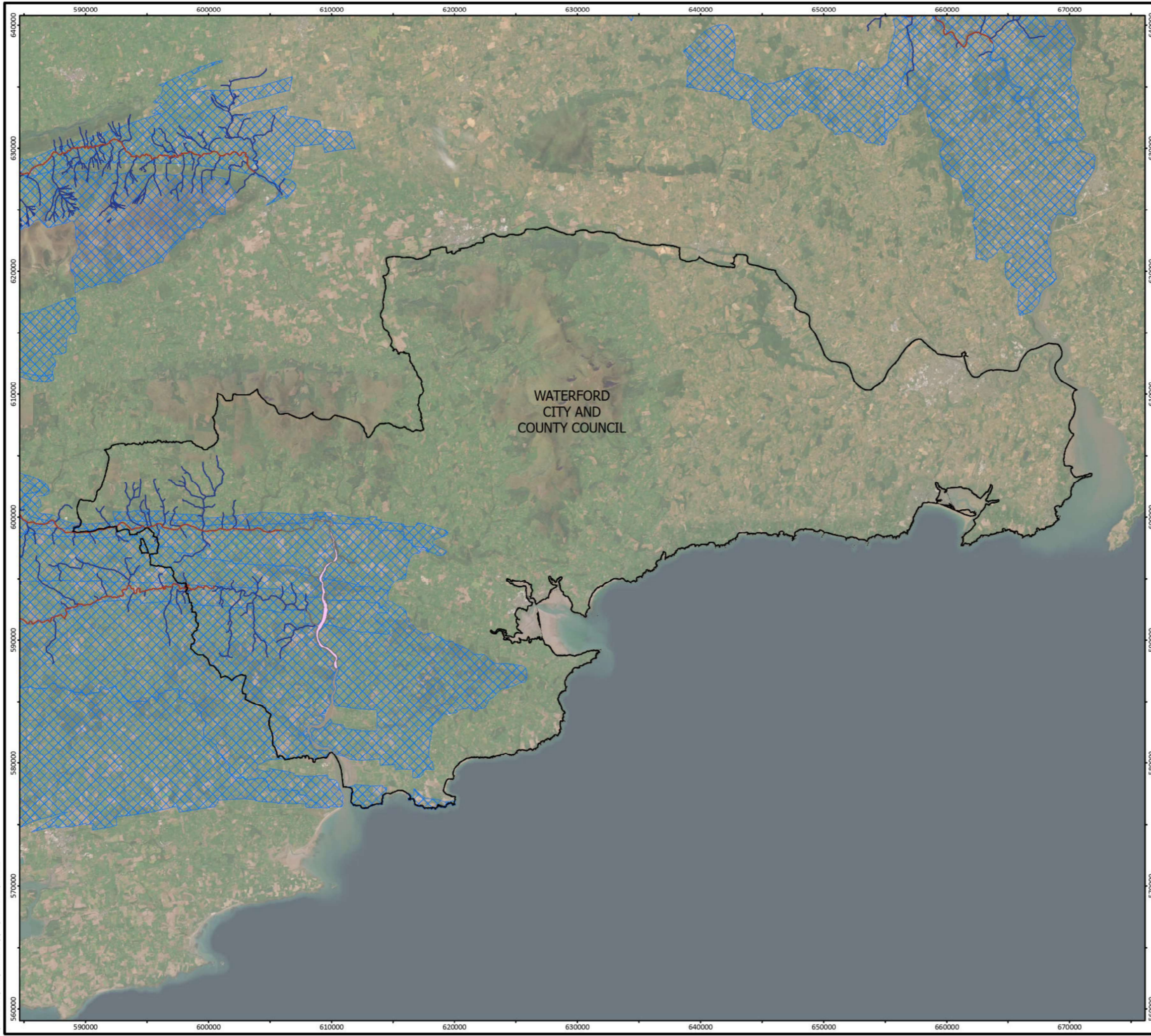
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- Legend**
- Local Authority Boundaries
 - WFD Bathing Water Areas Polygon Features - graphic representation of beach only
 - WFD Surface Water Polygons that intersect with BATH_BathingLocations Point Feature dataset
 - Designated Bathing Water Locations Point Features (Officially Designated Beach)

WFD Register of Protected Areas	
Bathing Water Areas	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18a
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3





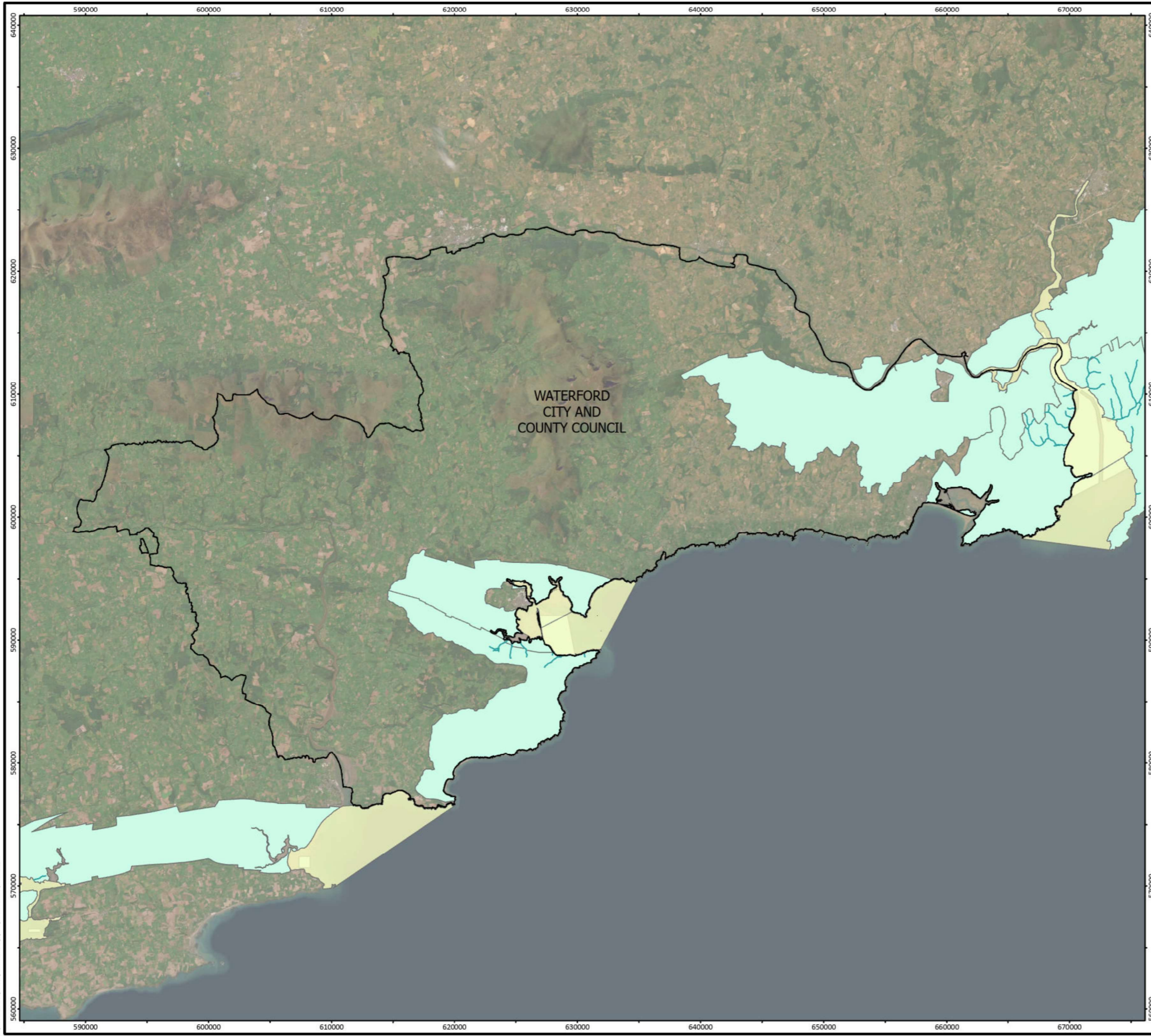
- Legend**
- Local Authority Boundaries
 - Officially designated under S.I. 293/1988
 - WFD Groundwater Bodies that intersect with Designated Salmonid Waters
 - WFD Groundwater Bodies that intersect with Designated Salmonid Waters
 - WFD Surface Water Polygons that intersect with Designated Salmonid Waters (Lake, Coastal and Transitional Water Bodies)

WFD Register of Protected Areas	
Salmonid	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18b
CLIENT: WATERFORD CITY AND COUNTY COUNCIL	
DATE: 23/01/2024	SCALE: 1:305,000 @ A3



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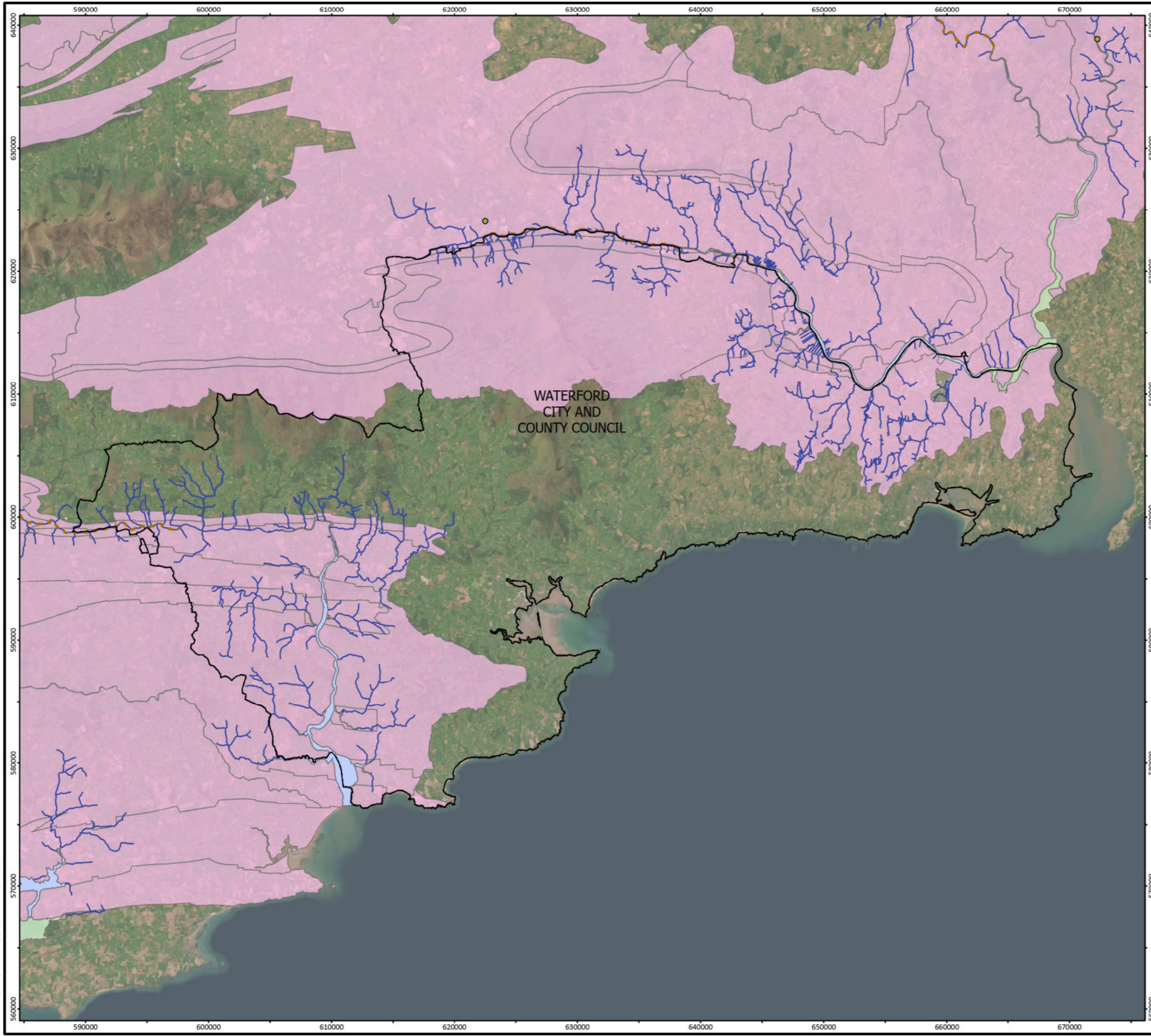


- Legend
- Local Authority Boundaries
 - WFD Riverwater Bodies that intersect with WFD_RPA_Shellfish
 - WFD Surface Water Polygons that intersect with WFD_RPA_Shellfish
 - WFD Groundwater Bodies that intersect with WFD_RPA_Shellfish
 - Designated Shellfish Area

WFD Register of Protected Areas	
Shellfish Areas	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18c
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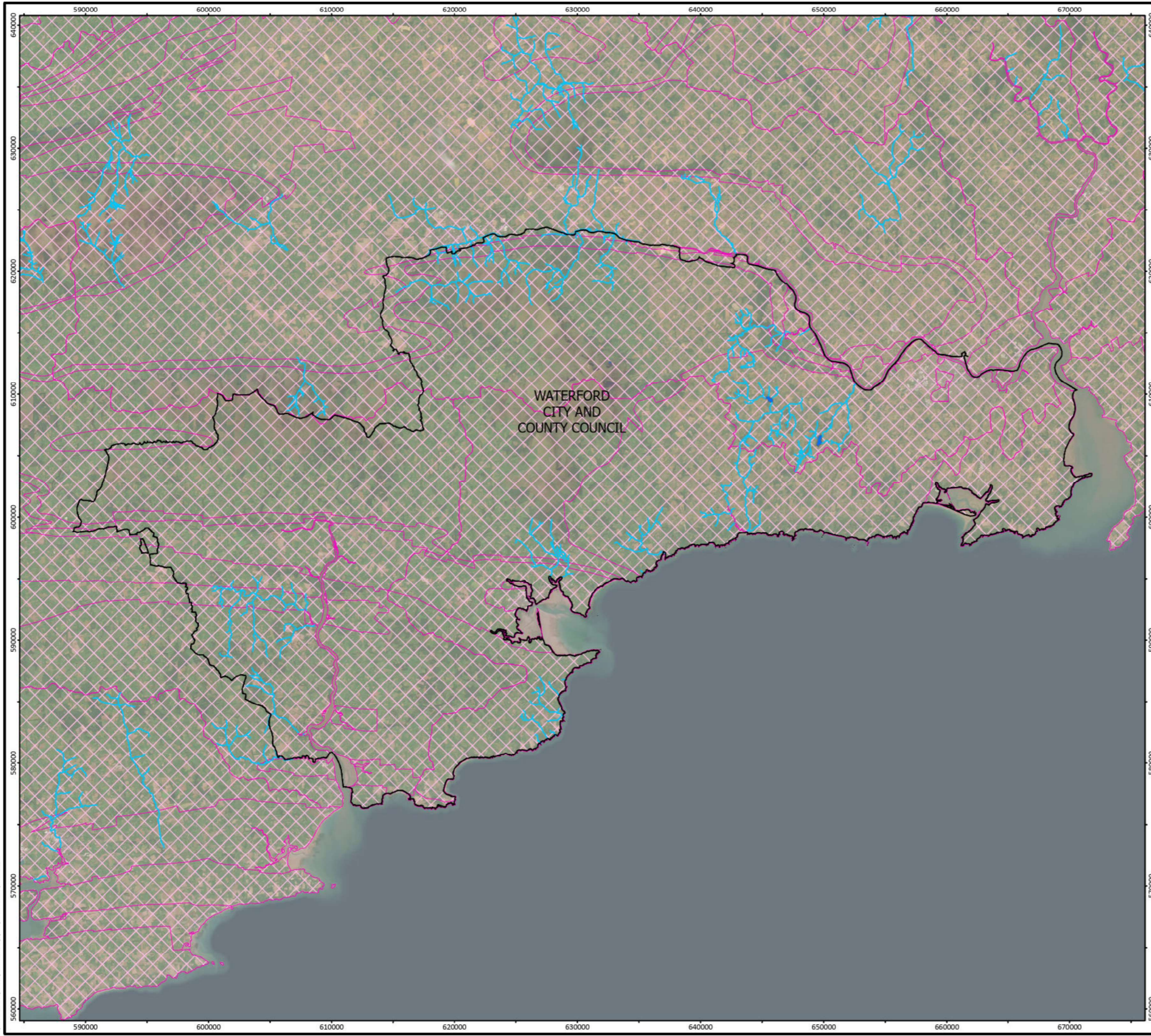






- Legend**
- Local Authority Boundaries
 - Designated Nutrient Sensitive Points
 - WFD Riverwater Bodies that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons)
 - Designated Nutrient Sensitive WFD_RiverwaterBodies
 - WFD Surface Water Polygons that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons) (Lake, Coastal and Transitional Water Bodies)
 - WFD Groundwater Bodies that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons)
 - Designated Surface Water Nutrient Sensitive Areas


WFD Register of Protected Areas	
Nutrient Sensitive Areas	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18d
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- Legend**
-  Local Authority Boundaries
 -  WFD Riverwater Bodies that are protected for drinking water
 -  WFD Lakewater bodies that are protected for drinking water
 -  WFD Groundwaters that are protected for drinking water

WFD Register of Protected Areas	
Drinking Water	
WATERFORD CITY AND COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18e
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4.10 Material Assets

4.10.1 Characterisation of the Environmental Baseline

Other level material assets include transport infrastructure, power generation plants and supply networks, water supply, wastewater treatment infrastructure and waste disposal sites among others. Potential opportunities and conflicts associated with these assets were considered in the SEA. Other material assets covered by the SEA included archaeological and architectural heritage and natural resources of economic value, such as soil⁵⁸, air and water.

4.10.2 Water Services

4.10.2.1 *Wastewater*

Waste water demand and capacity information at settlements that were considered by the SEA, where available, includes⁵⁹:

- Population served.
- Loading.
- Capacity.
- Level of treatment.
- Spare capacity or shortfall.
- Compliance with the Urban Waste Water Treatment Directive.
- Wastewater infrastructure investment needs.

The EPA produces annual reports on the treatment of urban wastewater from cities, towns and urban communities. The latest EPA 2022 report⁶⁰ 'Urban Waste Water Treatment in 2021' identifies the priority areas where resources must be targeted, in order to protect the environment from the harmful effects of waste water and deliver environmental improvements where they are most needed. Based on the EPA's assessment of monitoring information provided by Uisce Éireann and the enforcement activities carried out by the EPA, this report identifies urban areas with the most important environmental issues that must be addressed. Dungarvan and Kill in Waterford are listed as priority areas.

4.10.2.2 *Surface Water Drainage*

Sustainable Drainage systems (SuDS) can minimise the quantity and increase the quality of surface water runoff as well as mitigating adverse impacts of climate change. SuDS can also provide amenity and biodiversity benefits.

⁵⁸ Soil and geological resources were considered under this topic including with respect to mineral locations and aggregate potential.

⁵⁹ Detailed water services information will inform the preparation of the SEA Environmental Report.

⁶⁰ Available at [Monitoring & Assessment: Wastewater | Environmental Protection Agency \(epa.ie\)](https://www.epa.ie/monitoring/assessment/wastewater/)



4.10.3 Waste Management

The Waste Management Act 1996 requires Local Authorities to make a waste management plan either individually or collectively for their functional areas. In 2015, Waterford was guided by the Southern Region Waste Management Plan 2015-2021 which provided the framework for solid waste management in the region. Post 2021, waste management in Ireland will be guided by the first National Waste Management Plan for a Circular Economy, which will replace the existing regional plans. This Plan sets out a framework for the prevention and management of waste in Ireland for the period 2023 to 2029.

4.10.4 Transport

Waterford is well served by public transport and road links. The N24, N25 and N72 traverse the County. Irish Rail operate services on the Kildare/Waterford service which is on the network of InterCity routes connected to the Dublin/ Cork Main Line. In addition, Bus Éireann and other private operators, including long distance couch services and local link bus services, operate on number of routes several times daily.

4.10.5 Blue and Green Infrastructure

Blue infrastructure (BI) and Green infrastructure (GI) are crucial components in building resilient communities capable of adapting to the consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality. The Blue Green Infrastructure plan for Waterford provides a vision and a robust spatial framework which will identify, protect, promote and enhance the GI assets in the urban, rural and coastal environments of the County. The existing Green Infrastructure in County boasts many key features and activities along the coast and across the urban, rural and upland areas. Many of these are iconic in nature, including the varied and dramatic coastline itself, Tramore and Dunmore East, the Comeragh Mountains, the Waterford Greenway, and the numerous rivers, streams, parks and open spaces of County and regional significance.

4.10.6 Public Assets and Infrastructure

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

4.10.7 Land

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

4.10.8 Coastline

The 147 km long coastline of Waterford is amongst the most sensitive and valuable resources in the County, in terms of natural and cultural heritage, scenic beauty and recreation. The coast (including harbours and piers) is also an important economic resource particularly for commercial fishing, fish processing, aquaculture, leisure and tourism industries in the County. Waterford airport and port also play a vital role providing the region with international connectivity.



4.10.9 Renewable Energy Potential

Under EU Directive 2001/77/EC Renewable Energy, renewable energy sources are defined as renewable non-fossil energy sources such as, but not limited to wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas, biogases and biochar (i.e., the thermal treatment of natural organic materials in an oxygen-limited environment). Available information on renewable energy potential within and adjacent to the County – and any associated Plan provisions – was considered by the SEA.

4.10.9.1 *Energy Related Material Assets and Infrastructure*

SEAI (2020⁶¹) published the kilotonnes of oil equivalent (ktoe) data which showed that 86% of Ireland's energy came from fossil fuels at that time. Transportation and residential represented the highest resource demand. The generation of renewable energy has been increasing over the past ten years, with a growth in the number of wind farms (from 5.8% of gross final energy consumption in 2010 to 13.5 of GFC in 2020⁶²). This is an important feature of Waterford's function both onshore and offshore.

All traditional power plants are in a process of transition to renewable/sustainable sources to align with the targets in the Climate Action Plan 2023.

The SEA of Material Assets utilised information from the following sources:

- Climate Change Advisory Council
- Department of Defence
- Department of Housing, Local Government, and Heritage (DHLGH)⁶³
- EPA - marine disposal sites
- ESB
- Iarnród Éireann
- Irish Bioenergy Association (IrBEA)
- Irish Solar Energy Association (ISEA)
- Uisce Éireann
- Irish Wind Energy Association (IWEA)
- Marine Atlas (for shipping port and route data)
- Ports Authority
- SEAI
- SFPA
- TII
- Waterways Ireland

⁶¹ SEAI. 2020. SEI01 - Energy Balance data resource; Available at [SEI01 - Energy Balance \(ktoe\) - Datasets - data.gov.ie](https://data.gov.ie/datasets/sei01-energy-balance-ktoc)

⁶² SEAI. 2020. Overall renewable energy share - available at [Renewables | Energy Statistics In Ireland | SEAI](https://www.seai.ie/energy-statistics-in-ireland)

⁶³ [Energy Offshore Renewable - Datasets - data.gov.ie](https://data.gov.ie/datasets/energy-offshore-renewable)



4.10.10 Key Issues Relating to the LACAP

It is not likely that the LACAP will result in significant effects to wastewater treatment or water services in general, given the nature of the plan. The key issues in relation to Material Assets were as follows:

- Disruptions to existing transport infrastructure through the development of alternative options such as active travel routes could occur,
- Demands for increased renewable infrastructure and associated connection networks,
- Visual impact of developments on the coastline, and
- Effects on sensitive receptors with increased demands for active travel/green/renewable infrastructure, in particular during the construction phase.
- The potential for effects on existing green and blue infrastructure and key ecological corridors from inappropriate development.

4.11 Tourism & Recreation

4.11.1 Characterisation of the Environmental Baseline

Tourism and recreation are influenced by a range of factors in Ireland. International tourism has increased in recent years; the 'Ireland's Ancient East' was launched, and the global brand success resulted in infrastructure demands to previously less trafficked areas. Fáilte Ireland has recently published their four brand strategies⁶⁴ which will define the spatial scope and spread of future tourism developments within Ireland. At a county level, Waterford City and County Council has developed the Waterford Tourism Strategy & Work Plan 2017–2022. Cultural Heritage sites also support heritage-related tourism and recreation. Landscape is also an important aspect in terms of Tourism.

The assessment of Tourism and Recreation utilised the following information sources:

- Department of Transport, Tourism and Sport,
- Central Statistics Office,
- Recreational sailing groups and ferry operators,
- Fáilte Ireland, and
- National Trails Office.

4.11.2 Key Issues Relating to the LACAP

The key issues in relation to Tourism and Recreation were as follows:

- Green infrastructure development may have the potential to restrict or reduce the quality of resources important for recreation and/or tourism including angling facilities, boating activities and/or associated resources; and

⁶⁴ Wild Atlantic Way, Dublin's a Breath of Fresh Air, Ireland's Ancient East and Ireland's Hidden Heartlands



- The promotion or development of blueways and greenways could add additional loading pressures in terms of visitor interactions at sensitive areas such as trampling, disturbance, erosion, littering etc.

4.12 Climate Change

The recent Climate Action and Low Carbon Development (Amendment) Act 2021 was established to provide for the approval of plans by the Government in relation to climate change. This aims at pursuing the transition to a climate resilient, biodiversity rich and climate neutral economy by no later than the end of the year 2050. Ireland's Climate Action Plan 2023 sets out Ireland's national and sectoral targets in this regard.

Future changes in climate and associated impacts on sea level, rainfall patterns/intensity and river flow will influence flooding frequency and extent in the future. Local Authorities in compliance with the Regional Planning Guidelines are attempting to adopt sustainable flood risk strategies in areas likely to be at risk of flooding in the future in the context of climate change and changing weather patterns. Changes to climate could lead to an increase in flooding events in Ireland. The OPW has undertaken a number of Flood Risk Management Studies for different River Basin Districts (RBDs) in Ireland. These studies have identified the areas which are most at risk and future management plans have been advised; these are adopted by the OPW. In some cases, mitigation measures will involve the construction of physical flood defences.

The SEA considered data related to climate from the following sources:

- Department of the Environment, Climate and Communications
- Climate Change Advisory Council's Annual Review 2023
- EPA
- CFRAM Studies⁶⁵

4.12.1 Key Issues Relating to the LACAP

The key issues in relation to Climate Change were as follows:

- The LACAP contributes to the targets, set out in the Climate Action Plan 2023.
- The potential impact of changes in climate including flooding and temperature increases should be factored into the LACAP.

⁶⁵ Office of Public Works (2021) Catchment-based Flood Risk Assessment and Management (CFRAM) Programme [gov.ie](http://www.gov.ie) - [CFRAM Programme \(www.gov.ie\)](http://www.gov.ie)



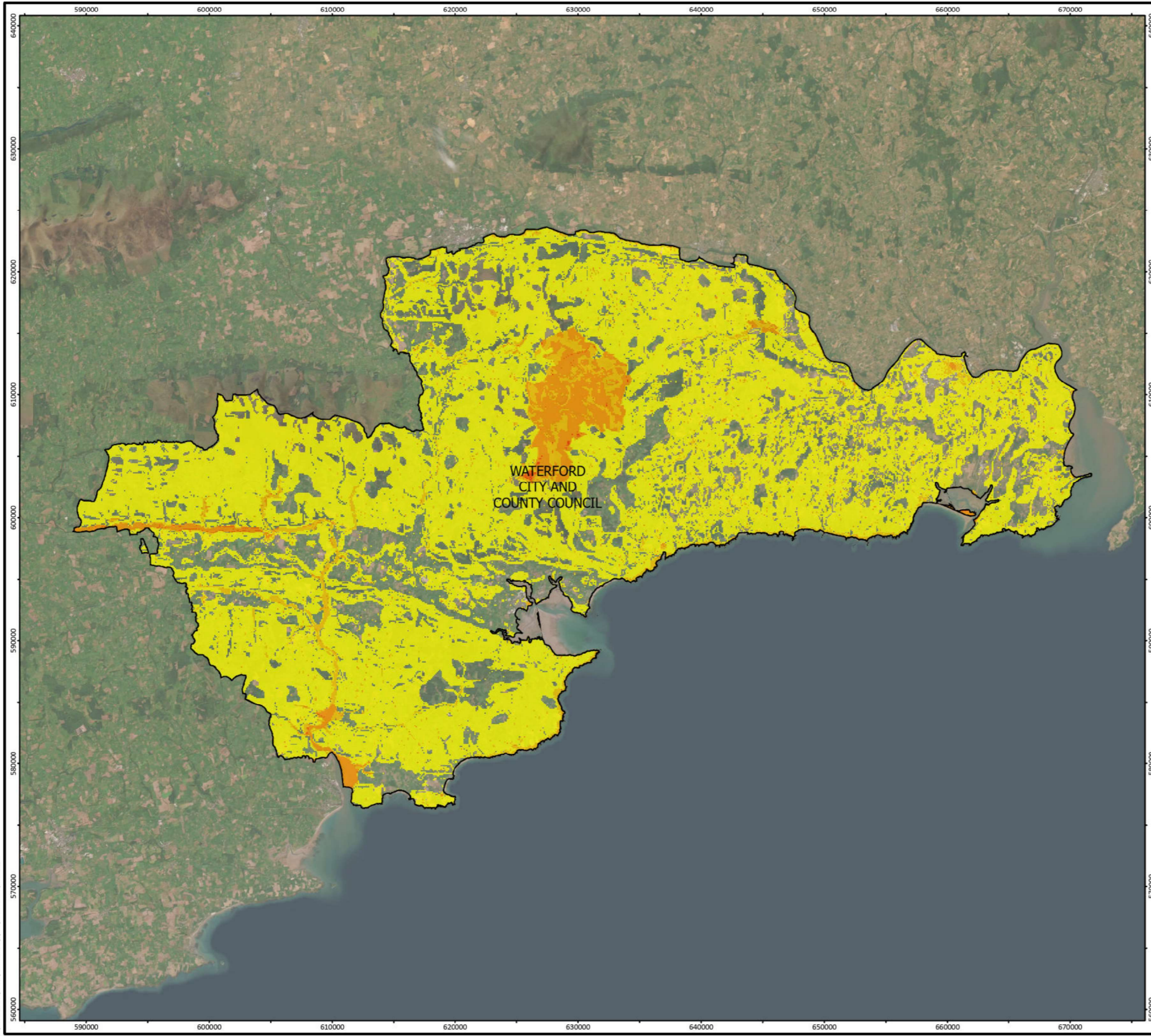
4.13 Constraints and Opportunities

The environmental baseline data was overlaid in raster form and ranked accordingly to produce an overall constraints and opportunities map for the Councils administrative boundary (Figure 4-19). The map was prepared using Geographical Information System (GIS) software that allowed for a weighting system to be applied with differentiation in certain layers as follows:

Vector Layer	Weighting	Rationale
SAC	1	Protected
SPA	1	Protected
NHA	1	Protected
pNHA	0.5	Not fully protected
Archaeological Heritage	1	Protected
WFD High	0.5	High quality most sensitive to perturbation
Wells and Springs	1	Protected
Groundwater High	1	High vulnerability most sensitive to perturbation
Salmonid Water	1	Protected

Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development or activities supported by Plan action will conflict with these sensitivities and cause environmental deterioration. However, the occurrence of environmental sensitivities does not preclude development or activities; rather it flags at a strategic level that the mitigation measures - which have been integrated into the Plan - will need to be complied with in order to ensure that the implementation of the plan contributes towards environmental protection.

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World Imagery: Earthstar Geographics
Construction: © OpenStreetMap (and) contributors, CC-BY-SA



Legend

Local Authority Boundaries

Constraints & Opportunities

- 0-1
- 1-2
- 2-3
- 3-4
- 4-5

Constraints and Opportunities

WATERFORD CITY AND COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.19

CLIENT: WATERFORD CITY AND COUNTY COUNCIL

DATE: 23/01/2024 SCALE: 1:305,000 @ A3

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4.14 Evolution of the Baseline Environment without the implementation of the LACAP

The SEA Directive requires that consideration is given to the likely evolution of the baseline environment in the event the LACAP is not progressed and implemented. In the event the LACAP was not implemented; the baseline environment would primarily evolve in line with the development management standards and environmental protection criteria defined in Waterford City and County Development Plan (CDP) 2022-2028, which is the primary development control framework relevant to the study area. The baseline environment would also be strongly influenced by the Local Area Plans (LAPs) for the County.

Whilst some level of climate related policy has been defined in the CDP, not progressing the specific set of climate mitigation and adaptation related actions defined in the LACAP would present several significant lost opportunities. A variety of likely positive environmental effects associated with LACAP implementation would not come to fruition. A number of potential adverse effects associated with the existing baseline scenario are more likely to occur.

It is less likely that the local authority as an organisation would adequately reduce its organisational GHG emissions in line with national GHG emission reduction targets. The variety of actions for reducing operational GHG emissions and promoting energy efficiency would not be implemented. There will be less, direct policy support for the local authority transitioning its vehicle fleet to being electric or being powered by renewable fuels, which will decrease the likelihood of this being done successfully.

None of the specific climate related adaptation or flood relief actions defined in the LACAP would be implemented. Climate change related risks relating to severe weather events (including storms and heatwaves) are less likely to be fully understood and controlled at local level as a consequence. For example, the risk of unforeseen and unmanaged climate change influenced flooding would be higher without the adoption of the defined adaptation actions. Such climate change related events have the potential to have significant adverse environmental effects on a variety of environmental receptors including local communities and ecological receptors.

The variety of nature based solutions proposed in the LACAP would not be implemented. The GHG emission sequestration potential associated with actions promoting the enhancement of ecological sites and greenspace would not be realised.

The biodiversity related protection measures defined in the LACAP would not be implemented, making it less likely that the risk to biodiversity and protected sites, habitats and species due to climate change factors will be adequately managed and controlled at local level.

The variety of community engagement measures defined in the LACAP will not be implemented. The result of this would be that GHG emission reduction opportunities relating to the local residential and commercial sectors associated with plan actions are less likely to be fully realised. The local residential and commercial sectors would be less supported in reducing their GHG emissions generally.

The active travel/sustainable transport related actions in the LACAP would not be implemented. The expansion of the EV network in the County will have less express policy support. Promoting a modal shift from private car use to the use of sustainable modes of transport will have less express, community level policy support. The potential for achieving this modal shift will be reduced. There will also be less potential to prevent and reduce local air quality impacts associated with the use of internal combustion engine vehicles in the County. The likelihood of exceedances of ambient air quality standards in the County due to vehicle emissions in congested areas would be greater as a result.



Overall, in the event the LACAP was not implemented, the net result would be the local authority and local community would be less likely to achieve GHG emissions reduction in line with national GHG emission reduction targets. At the same time, the risk of negative environmental effects occurring as a result of climate change related risks would be greater.



5. STRATEGIC ENVIRONMENTAL OBJECTIVES

The SEA Directive states that an SEA should also look at *'the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.'* The identification of environmental protection objectives relevant to a plan provide the basis for evaluating the significance of impacts during the SEA process. All environmental protection objectives relevant to the LACAP were identified. Further information on other P/P's that define environmental protection objectives relevant to the LACAP is provided in Appendix 1 to this document.

Strategic Environmental Objectives (SEOs) are methodological measures which facilitate the development of targets against which the environmental effects of the LACAP can be tested. SEOs are based on wider environmental protection objectives on local, regional, national, European and international level that are relevant to WCCC's LACAP. They are high-level in nature and set strategic goals for improvement.

In this section, SEOs were defined for range of Environmental Components and can be used as standards against which the provisions of the LACAP can be evaluated in order to help identify areas in which potential significant adverse impacts may occur. The use of these objectives ensured that the SEA focused only on those environmental issues that are most relevant and significant to the LACAP and the Study Area.

The development of SEOs was appropriately informed by the SEA Scoping stage of the SEA process, including consultation with statutory Environmental Authorities, interested stakeholders and the general public.

All SEOs applicable to the LACAP are presented in Table 5-1.



Table 5-1: Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species. ⁶⁶
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.
	B4	To avoid or minimize significant impacts on semi-natural habitats, species, environmental features, or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation; and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.
Landscape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.
	AQN3	Avoid or minimise adverse noise impacts.
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.

⁶⁶ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.



Environmental Component	SEO Code	Strategic Environmental Objective
	W5	Prevent impact upon drinking water quality.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.
	MAI3	Promote sustainable transportation.
	MAI4	Promote sustainable waste management.
	MAI5	Promote sustainable water use and drainage management.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change



6. DESCRIPTION AND EVALUATION OF LACAP ALTERNATIVES

6.1 Introduction

Article 5(1) of the SEA Directive states that: *'Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.'*

The SEA Directive requires that reasonable alternative means of achieving the strategic goals of the LACAP (taking into account the objectives and the geographical scope of a plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Such reasonable alternative must be realistic and capable of implementation.

This section of the SEA Environmental Report examined reasonable alternatives to WCCC's LACAP and systematically evaluated the likely significant effects of these alternatives.

Reasonable alternatives to the LACAP were initially explored and examined during the SEA Scoping stage of the SEA process, having regard to the scope, function and strategic aims and main objectives of the LACAP, as defined in the Local Authority Climate Action Plan. This process facilitated the accurate identification of reasonable alternatives to the LACAP and also suitably informed the plan-making process, ensuring optimal environmental outcomes.

The reason for considering identified reasonable alternatives within the scope of the environmental assessment was clearly described and documented. A description of how the assessment of alternatives was carried out was provided.

Reasonable alternatives were assessed against the Strategic Environmental Objectives (SEOs) established for the aspects of the baseline environment which are likely to be significantly affected by the LACAP. The purpose of this was to determine if the reasonable alternative resulted in positive, negative, neutral or uncertain environmental outcomes. This assessment process can result in mixed-effects outcomes.

The description and evaluation of reasonable alternatives in this report was undertaken in accordance with guidelines defined in the following two guidance document primarily:

1. Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment, DEHLG 2004.
2. Developing and Assessing Alternatives in Strategic Environmental Assessment, EPA 2015.

6.2 Goal of the Reasonable Alternative Evaluation Process in SEA

The underpinning goal of the reasonable alternative evaluation process is to ensure that the selection of preferred alternatives by the Local Authority is informed by environmental considerations including:

- The LA's role in influencing sectors and communities with respect to climate action,
- The LA's role in co-ordinating and facilitating climate action – particularly with reference to the DZ, and
- The LA's role in creating the local vision for climate action and building capacity to achieve this through advocacy.



6.3 Approach to Developing Reasonable Alternatives

A range of alternatives to the LACAP were considered during the plan-making process. The approach for identifying reasonable alternative to the LACAP is defined below:

1. Iterative communication was held between the plan-making and environmental assessment teams to identify the various alternative approaches and options being considered to achieve the vision of the LACAP - the reduction of GHG emissions at Local Authority organisational level and within the Community in support of Climate Action policy. This communication commenced early on during the plan-making process.
2. Reasonable alternatives considered were identified. For an alternative to be considered reasonable, it must be practical/functional, realistic and implementable. An evaluation of whether each alternative was practical/functional, reasonable and implementable took place. This evaluation considered the following factors:
 - 2.1. The vision of high-level objectives of the LACAP.
 - 2.2. The geographic scope of the LACAP.
 - 2.3. The actual powers and functions of the Local Authority.
 - 2.4. The climate action merits of the alternative.
 - 2.5. The genuine ability of the alternative to achieve the LACAP vision and high-level objectives.
 - 2.6. The technical feasibility of the alternative.
 - 2.7. The availability of resources, including financial resources to deliver the LACAP within the required timeframe.
 - 2.8. The policy hierarchy and the parameters placed around the LACAP by higher-level policy.
 - 2.9. The legislative context and the parameters placed around the LACAP by climate action and environmental related legislation.

The toolkit contained in the EPA's guidelines entitled '*Developing and Assessing Alternatives in Strategic Environmental Assessment Good Practice Guidance*' (2015) was utilised when identifying reasonable alternatives. The 'Why? What? Where? When?' Model defined in the guidelines were used when framing reasonable alternatives, as shown in Figure 6-1.

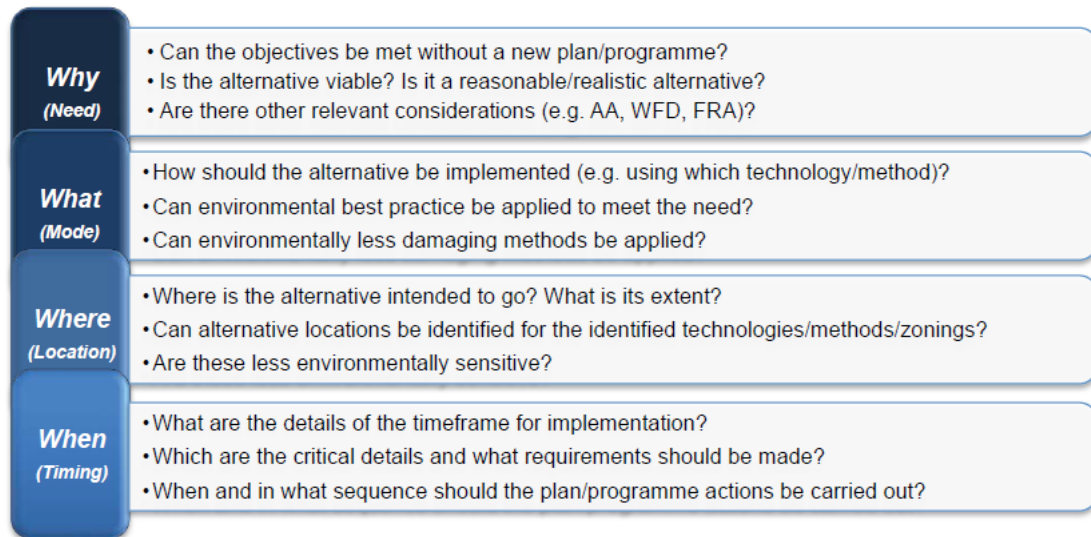


Figure 6-1: 'Why? What? Where? When?' Model for framing alternatives - Adapted from Figure 4.3 Developing and Assessing Alternatives in the Strategic Environmental Assessment Process (EPA, 2015).

6.4 Identification and Description of Reasonable Alternatives

Reasonable alternatives to the LACAP were identified. A description of these reasonable alternatives and the reasons for selecting these reasonable alternatives are presented in Table 6-1.

A 'Do Nothing' or 'Do Minimum' alternative is not a reasonable alternative in this instance as the preparation of an effective LACAP is a statutory requirement under Section 16 of the Climate Act.



Table 6-1: Reasonable Alternatives to the LACAP

Reasonable Alternative	Description of Reasonable Alternative	Reasoning for selecting this Reasonable Alternative (having regard to the 'Why? What? Where? When' Model defined in Figure 6-1).
<p>Alternative 1 - The Pareto Approach: Prioritise reducing GHG emissions from largest GHG emitting sectors to mitigate against climate change impacts.</p>	<p>This alternative involved developing a LACAP that primarily focusses on climate mitigation and reducing GHG emissions associated with the largest GHG emitting sectors in the County that a local authority can reasonably influence having regard to the functions of a local authority - the Residential and Transport sectors.</p>	<p>This was a viable alternative that could achieve a significant reduction in GHG emissions by prioritising and supporting climate mitigation related action for the Residential and Transport sectors. This alternative would be relevant to the county of Waterford County. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).</p>
<p>Alternative 2 - The Holistic Approach: Adopt a multi-pronged approach and focus on a range of priority areas to mitigate against and adapt to climate change impacts.</p>	<p>This alternative involved developing a LACAP that has a balanced focus on both climate mitigation and adaptation across several goal areas and all socio-economic sectors.</p>	<p>This was a viable alternative that would have enhanced potential to reduce GHG emissions across multiple sectors, potential to offset GHG emissions, and greater potential to protect the local community and the environment from climate change related risks. Climate mitigation and adaptation actions across a wide breath of goal areas would be supported by the LACAP. This alternative would be relevant to the county of Waterford County. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).</p>
<p>Alternative 3 - The Holistic and Participatory Approach (Current LACAP): Adopt a multi-pronged approach - that has a strong community engagement emphasis - and focus on a range of priority areas to mitigate against and adapt to climate change impacts.</p>	<p>This alternative involved developing a LACAP that has a balanced focus on both climate mitigation and adaptation across several goal areas and all socio-economic sectors, and which has a strong community engagement emphasis, which underpins, supports and drives the climate action contained in the LACAP.</p>	<p>This was a viable alternative that would have enhanced potential to reduce GHG emissions across multiple sectors, potential to offset GHG emissions, and greater potential to protect the local community and the environment from climate change related risks. Climate mitigation and adaptation actions across a wide breath of goal areas would be supported by the LACAP. The range of climate mitigation and adaptation actions defined in the LACAP is likely to have better community level and organisational support given its strong community engagement emphasis. This alternative would be relevant to Waterford County. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).</p>



6.5 Evaluating the Environmental Effects of Reasonable Alternatives

An evaluation of the potential effects of the reasonable alternatives on the baseline environment was carried out in accordance with the SEA Directive and best practice guidelines. An evaluation matrix was developed to facilitate the evaluation of the environmental effects of reasonable alternatives on SEOs relating to each Environmental Component. This evaluation matrix is presented in Table 6-2.

Potential effects of the reasonable alternatives were categorised as follows in the matrix:

- Potential Positive Environmental Impact (indicated in the matrix by a '+').⁶⁷
- Potential Negative Environmental Impact (indicated in the matrix by a '-').⁶⁸
- Potential Positive and Negative Environmental Impacts (indicated in the matrix by a '+/-').
- Uncertain Environmental Impact (indicated in the matrix by a '?').
- Neutral, No or Insignificant Environmental Impact (indicated in the matrix by a '0').

⁶⁷ Potential Positive Environmental Impacts are defined as having the potential to support the achievement of an SEO.

⁶⁸ Potential Negative Environmental Impacts are defined as having the potential to hinder the achievement of an SEO.



Table 6-2: Evaluation of the Environmental Effects of Reasonable Alternatives

Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current LACAP) (A3)	Commentary
Population & Human Health	PHH1	+/-	+/-	+/-	All alternatives considered will support the achievement of this SEO to some degree by promoting sustainable transportation and a modal shift that will have the benefit of reducing vehicle emissions. A3 will deliver these benefits more effectively however given the community engagement emphasis associated with this alternative. All alternatives will likely support active travel related development that may have some degree of adverse effect on population and/or human health through the generation of construction phase dust, noise or congestion in the absence of appropriate mitigation.
	PHH2	0	+	+	A2 and A3 are more holistic in nature and are likely to define specific nuanced and carefully balanced action that aligns with economic development objectives defined in the CDP and supports the achievement of this SEO.
Biodiversity, Flora & Fauna	B1	0	+	+	A2 and A3 will define specific action supporting the enhancement of biodiversity and the protection of biodiversity from climate change risks, including nature based solutions.
	B2	0	+	+	
	B3	0	+	+	A1 will strongly emphasise reducing GHG emissions associated with the Residential and Transport sectors. It is less likely this alternative would define a wide range of climate adaptation measures that would fully protect biodiversity from climate change risks.
	B4	0	+	+	
	B5	0	+	+	
Landscape, Seascape & Visual Amenity	L1	-	+/-	+/-	All alternatives have the potential to support development that may have a negative impact on landscape character or visual amenity in absence of any mitigation. A2 and A3 are more balanced in nature and are likely to support nature based solutions, greenspace development and sustainable urban drainage systems which may contribute positively to landscape character or visual amenity.
	L2	-	+/-	+/-	
Cultural Heritage - Archaeology & Architectural	CH1	0	+	+	A1 is less likely to define wide ranging climate adaptation related action that would protect cultural heritage, archaeology and architectural features from climate change risks. A2 and A3 are more balanced in nature and will likely define heritage climate adaptation action which will protect heritage resources from climate change risks.



Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current LACAP) (A3)	Commentary
Soils	S1	-	-	-	Each of the alternatives are likely to support some degree of development that may be impact the receiving soils environment in the absence of mitigation.
Land Use	LU1	-	+/-	+/-	All alternatives have the potential to support development that may have a negative impact on land use characteristics in the absence of mitigation. A2 and A3 are more balanced in nature and are likely to support wide ranging positive actions that could lead to improving land use value and characteristics, including actions underpinned by nature based solutions.
Air Quality and Noise	AQN1	+	+	+	Each alternative will deliver to a certain degree in relation to this by promoting sustainable transportation and a modal shift. A3 will deliver most effectively in this regard given the strong community engagement component associated with this alternative.
	AQN2	+/-	+/-	+/-	A1, A2 and A3 are all likely to support the development that may give rise to local air quality impacts - as a result of the generation of airborne dust during construction activities - in absence of any mitigation. At the same, each of these alternatives will spur modal shift that may result in positive local air quality impacts by reducing the level of vehicle related emissions.
	AQN3	-	-	-	A1, A2 and A3 are all likely to support the development that may give rise to noise impacts during the construction phase of the development in absence of any mitigation.
Water	W1	-	+/-	+/-	Each alternative is likely to lead to development that could potentially have an adverse impact upon surface water, groundwater or bathing water quality in absence of any mitigation. A2 and A3 are more likely to promote the development of nature based solutions and sustainable urban drainage systems that could result in positive effects on water quality. These options will also support the implementation of climate adaptation measures that would reduce the risk to water quality associated with climate change risks. A2 and A3 are more are more likely to define climate adaptation action, and specifically flood relief related action, which would better support the achievement of W4 and conformance with Flood Risk Management Guidelines.
	W2	-	+/-	+/-	
	W3	-	+/-	+/-	
	W4	0	+	+	
	W5	-	+/-	+/-	



Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current LACAP) (A3)	Commentary
Material Assets	MAI1	-	-	-	A1, A2 and A3 are all likely to support development that may have a potential negative impact on infrastructure, including existing road infrastructure, in the absence of appropriate mitigation measures.
	MAI2	-	-	-	
	MAI3	+	+	+	All alternatives are likely to contain a suite of climate actions that are supportive of sustainable transportation.
	MAI4	0	+	+	A1 will place a strong emphasis on reducing GHG emissions associated with the Residential and Transport sectors and is likely to place less emphasis on reducing lifecycle GHG emissions associated with promoting better waste/resource management and circularity in the economy. A2 and 3 are likely to contain a wide range of climate action, including circular economy related actions that will better support efficient waste management and a reduction in resource related lifecycle GHG emissions.
	MAI5	0	+	+	A1 will place a strong emphasis on reducing GHG emissions associated with the Residential and Transport sectors and is likely to place emphasis on reducing lifecycle GHG emissions associated with promoting water use efficiency. A2 and 3 are likely to contain a wide range of climate action, including actions that will better support efficient water use and management that would have the benefit of reducing lifecycle GHG emission associated with water use to some degree.
Tourism & Recreation	TR1	-	+/-	+/-	Each alternative is likely to lead to some degree of development involving construction activity that may impact tourism and recreation amenity in the absence of appropriate mitigation. Such construction may need to take place at locations that are sensitive based on their amenity and recreational value, including high amenity parkland and coastal locations. A2 and A3 are both likely to support climate action that positive impacts on tourism and recreation amenity, including climate action that focusses on nature based solutions and biodiversity/protected site protection and enhancement.
Climate Change	CF1	+	+	+	A1, A2 and A3 all support the achievement of climate change related SEOs to some extent.
	CF2	+	+	+	
	CF3	+	+	+	



Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current LACAP) (A3)	Commentary
	CF4	+	+	+	A3 has the best potential to deliver effective climate action given its holistic, wide encompassing nature; and given its strong community engagement emphasis, which supports better participation in climate action at community level.
Inter-relationships	IR1	0	+	+	A3 is likely to support maintaining and enhancing human health and eco-system processes the most given its holistic and well balanced nature and community engagement emphasis.



6.6 Reasons for Choosing the Preferred LACAP

Alternative 1 - The Pareto Approach - will lead to some positive environmental effects and will result in the reduction of GHG emissions in the sectors that the local authority can control or exert substantial influence on that contribute most in terms of GHG emission in the County - the Residential and Transport sectors. It is less likely that this alternative would have delivered the wide-ranging climate mitigation and offsetting related action required to fully realise GHG emission reduction potential in the County. It is also less likely this alternative would have defined a wide range of climate adaptation measures that would fully protect biodiversity, heritage resources, environmental receptors and people from climate change risks. This alternative approach may have generated several negative environmental effects, which would not be counterbalanced by the positive environmental effects associated with Alternatives 2 and 3.

Alternative 2 - The Holistic Approach - and Alternative 3 - The Holistic and Participatory Approach - would both broadly deliver suitably wide ranging and effective climate action. These alternatives have the potential to generate multiple positive environmental effects, including a reduction in GHG emissions at organisational, community and sectoral levels, in addition to a variety of other environmental benefits. These alternatives would place a balanced emphasis on both climate mitigation and adaptation action, ensuring climate change related environmental risks are adequately understood and managed at community level.

Alternative 3 had the best potential to deliver effective climate action given its holistic, wide encompassing nature; and given its strong community engagement emphasis, which supports better participation in climate action at community level. Alternative 3 had better potential therefore to fully realise potential environmental effects than Alternative 2.

Reasonable Alternative 3 - The Holistic and Participatory Approach - therefore constituted the preferred alternative or preferred plan.

6.7 Data Gaps and Technical Limitations relating to the Identification and Evaluating Reasonable Alternatives

There were no data gaps or technical limitations that inhibited the ability of the project team to identify and evaluate reasonable alternatives being considered at high level during the plan-making process.



7. EVALUATION OF THE ENVIRONMENTAL EFFECTS OF LACAP IMPLEMENTATION

7.1 Introduction

An evaluation of the potential effects of the Preferred LACAP on the baseline environment as characterised and described in Section 4 of this report was carried out and is documented in this section of the report. This evaluation was carried out against the Strategic Environmental Objectives (SEOs) established for the aspects of the baseline environment which are likely to be significantly affected by the LACAP. These SEOs are documented in Section 5 of this report.

7.2 Evaluation of the Environmental Effects of LACAP Implementation

A detailed evaluation of the potential effects of the Preferred LACAP on the baseline environment was carried out in accordance with the SEA Directive and best practice guidelines. An evaluation matrix was developed to facilitate the evaluation of the Preferred LACAP on SEOs relevant to each Environmental Component. An explanation of the approach and methodology for this detailed evaluation and completed evaluation matrices for each LACAP Goal Area are contained in Appendix 3 of this report.

An overview of the key environmental effects the LACAP may have on Environmental Components has been presented in Table 7-1.

The following should be noted in relation to the evaluation undertaken:

- The evaluation is strategic and high-level in nature given the strategic nature of the LACAP.
- Environmental effects of the LACAP have been described in accordance with descriptive terminology defined in the Environmental Protection Agency's guidance document entitled 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' (2022).
- The evaluation considers all potential direct, indirect/secondary, cumulative⁶⁹, synergistic⁷⁰, short, medium and long-term, permanent and temporary, positive and negative environmental effects.
- The evaluation considers inter-relationships and interactions between one Environmental Component and another which can result in an environmental impact.
- The evaluation considers all potential environmental effects arising from unforeseen abnormal events.
- The evaluation considers potential transboundary effects.
- The potential environmental effects described are the potential effects that could occur with the adoption of any environmental mitigation measures.

⁶⁹ The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

⁷⁰ The addition of effects to create a total effect greater than the sum of the individual effects so that the nature of the final impact is different to the nature of the individual impact.



Table 7-1: Overview of the Key Environmental Effects of LACAP Implementation

Key Environmental Effect	Main Relevant Environmental Component/s
The variety of climate actions defined in the plan, including organisational and community based actions are likely to generate multiple, slight positive effects on climate - having regard to the share of GHG emission reductions that can be supported via each individual action relative to national GHG emission reduction targets and requirements.	CC, AQN.
The plan is broadly supportive of different forms of community and local area based renewable energy development, which will have a positive effect on the climate environment.	CC, AQN.
In the absence of appropriate mitigation, community and local area renewable energy development that might be supported by plan actions, including any associated ancillary and linear infrastructure, has the potential to have a variety of unintended and potentially significant negative environmental effects however, including effects on local human receptors, biodiversity, landscape character and visual amenity, and the receiving noise environment.	PHH, BFF, L, AQN.
The plan supports the increased use of light-emitting diode (LED) lighting potentially across a wide geographic area. In absence of appropriate mitigation, the wide use of such lighting may lead to adverse effects on sensitive nocturnal species.	BFF.
Several plan actions are supportive of the upgrading/retrofitting of buildings to improve energy performance. In the absence of appropriate mitigation, such actions may have unintended and potentially significant negative effects on buildings that constitute protected structures, or on the context in which such protected structures of architectural or cultural heritage merit sit.	CH.
The plan supports the carrying out of a range of flood relief and resilience actions, including development and maintenance related actions. This range of actions will generate positive environmental effects on water quality, hydrology and biodiversity. The delivery of this action has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including human receptors, ecological receptors and cultural heritage assets.	W, BFF, PHH, CH.
The carrying out of the range flood relief and resilience action contained in the plan has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems and the receiving air, noise and human environments (due to construction related impacts).	W, BFF, AQN, PHH.



Key Environmental Effect	Main Relevant Environmental Component/s
<p>The plan supports the carrying out of a variety of coastal protection related action, including action intended on mitigating coastal flood or erosion risk. These range of actions have the potential to have positive effects on biodiversity and water quality. The delivery of this action has the potential to reduce flood risk and prevent flood events, generating positive effects on a range of environmental receptors. Such action will also reduce the risk of coastal erosion processes, which will positively affect the soils environment present at coastal locations generally.</p>	<p>BFF, W, S.</p>
<p>The carrying out of coastal protection related action contained in the plan has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on water quality and the hydrology of marine and estuarine water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems and the receiving air, noise and human environments (due to construction related impacts).</p>	<p>W, BFF, AQN, PHH.</p>
<p>The plan contains a set of actions designed to promote better resource management and the circular economy at organisational, community and local area level. This action, if implemented effectively, is likely to have some degree of environmental effect, as it will support proper waste management, reduce the risk of waste related environmental pollution or nuisance, and promote material circularity and resource efficiency, and consequently a reduction in material production related lifecycle GHG emissions.</p>	<p>MA, W, S, PHH, CC.</p>
<p>The inappropriate or improper implementation of waste management related action could have unintended, negative environmental and nuisance related effects, including effects on the receiving human, air, noise, water, soils and traffic environment.</p>	<p>PHH, AQN, N, S, MA.</p>
<p>The plan supports the development of community and local area level nature based solutions - in response to climate related risk - which are supportive of biodiversity protection and enhancement. This action has the potential to have wide ranging slight to significant positive effects on biodiversity, flora and fauna.</p>	<p>BFF.</p>
<p>The plan supports green infrastructure development broadly. In absence of appropriate design and mitigation, the development of green infrastructure that is of a significant scale or extent could potentially result in negative environmental effects, including negative construction related effects, negative effects on biodiversity or negative effects on cultural heritage assets.</p>	<p>PHH, W, S, AQN, BFF, CH.</p>
<p>The plan defines a variety of climate adaptation related actions designed to protect human receptors, biodiversity and heritage assets from the impacts of climate change influenced events such as flooding. The implementation of this action has the potential to generate positive effects for these environmental receptors - by reducing the risk of such events impinging on or damaging these receptors.</p>	<p>PHH, BFF, CH.</p>



Key Environmental Effect	Main Relevant Environmental Component/s
<p>LACAP actions support the development, expansion and management of safe active travel networks. The delivery of an expanded safe active travel network has the potential to promote the use of sustainable and active travel modes in the community, encourage modal shift, reduce traffic related risks and support the reduction of vehicle related emissions - thereby positively impacting population and human health, local air quality and the climate environment.</p>	<p>PHH, AQN, CC, LU, MA.</p>
<p>LACAP actions support the development, expansion and management of safe active travel networks. In the absence of appropriate design and mitigation, the development of active travel networks, depending on the particular nature, scale and extent of such development, could potentially have slight to significant negative effects on the receiving human, noise, air, water, soils, biodiversity, cultural heritage or existing traffic and transport environments.</p>	<p>PHH, AQN, W, S, BFF, CHH, MA, LU.</p>
<p>LACAP actions support the expansion of the Electric Vehicle (EV) charging network and active travel parking in the local authority functional area. The successful delivery of this action has the potential to underpin the use of EV vehicles and active travel modes at community and local area level and support the reduction of vehicle related emissions, thereby positively impacting on local air quality, the climate and population and human health.</p>	<p>AQN, CC, PHH.</p>
<p>LACAP actions support the expansion of EV charging network and active travel parking across the breadth of the local authority functional area. In the absence of appropriate mitigation, the construction of additional charging point infrastructure can negatively impact on the receiving human, noise, air, water, soils, biodiversity, cultural heritage, material asset or existing traffic and transport environments.</p>	<p>PHH, AQN, W, BFF.</p>



7.3 Potential Cumulative Effect of the LACAP in combination with other Plans and Projects

The cumulative effects of a plan are an important consideration in SEA given that a plan may envisage the occurrence of many different actions and developments taking place in parallel with each other in a particular location/geographic area over a particular time period. One benefit of SEA is being able to evaluate the in-combination environmental effects of multiple envisaged projects.

The following types of cumulative effects can occur due to the implementation of a plan:

- Intra-plan Cumulative Effects - Individual environmental effects associated with a single plan interacting and combining to create a larger environmental effect.
- Inter-plan Cumulative Effects - The environment effects of a plan and the environmental effects of another plan interacting and combining to create a larger environmental effect.

7.3.1 Intra-plan Cumulative Effects

The evaluation of LACAP intra-plan cumulative effects was embedded into the detailed evaluation of environmental effects presented in Appendix 3. Potential intra-plan cumulative effects are presented below:

- The LACAP provides for actions which support the delivery of development and infrastructure projects (in the form of flood relief, coastal protection, active travel, renewables, nature based solutions projects) which could contribute - if incorrectly managed - to cumulative impacts through construction related environmental effects (site run-off, dust, noise pollution etc.).
- Increased access to natural amenity sites could be facilitated by the combination of actions within the LACAP. Therefore, there could be cumulative effects related to this, particularly along waterways, in combination with other plans that support increased access to such sites.
- The LACAP supports a variety of actions relating to flood relief and alleviation projects, which could introduce catchment level cumulative impacts on water quality, flow and hydrological regime/characteristics.
- The effects of multiple LACAP actions have the potential to combine to robustly support a shift to sustainable and active travel modes of transport. This has the potential to generate a variety of cumulative positive environmental effects, including positive effects on local air quality, human health, biodiversity and climate.
- The variety of positive effects of associated with the implementation of plan actions have the potential to combine and interact and have long-term and wide encompassing positive environmental effects on a variety of environmental components, including population and human health, climate biodiversity, water quality and hydrology, traffic and transport, material assets, cultural heritage and landscape and visual amenity.
- The variety of positive climate related effects associated with plan actions have the potential to combine to create a larger and very significant positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.

The potential cumulative environmental effects listed above have the potential to extend beyond the boundary of the local authority functional area.



LACAP actions that generate positive or negative environmental effects for one environmental component have the potential to indirectly generate positive or negative environmental effects for interrelated environmental components. For example, actions supporting the delivery of SuDS will improve water quality, which in turn can have a positive effect on aquatic ecology. An assessment of impact inter-relationships and interactions is embedded in the evaluation of environmental effects that was carried out in this report. This ensures that there was adequate coverage of all potential environmental effects associated with the implementation of plan actions. A matrix showing the existence of potential inter-relationships between environmental components was developed and is presented in Table 7-2 to aid in the understanding of these relationships.



Table 7-2: Inter-relationship between Environmental Components

	Population and Human Health	Biodiversity, Flor and Faun	Landscape, Seascape and Visual Amenity	Cultural Heritage - Archaeology & Architectural	Soils	Land Use	Air Quality and Noise	Water	Material Assets	Tourism and Recreation	Climate Change
Population and Human Health											
Biodiversity, Flora and Fauna											
Landscape, Seascape and Visual Amenity											
Cultural Heritage - Archaeology & Architectural											
Soils											
Land Use											
Air Quality and Noise											
Water											
Material Assets											
Tourism & Recreation											
Climate Change											

Note: Green highlighting indicates a potential interrelationship/interaction



7.3.2 Inter-plan Cumulative Effects

Other plans and programmes that the LACAP has a relationship with are identified in Section 2.5 of this report. It should be noted that all other plans programmes have been or will be subject to environmental assessment, including SEA and AA, for the purpose of preventing and mitigating potential negative environmental effects. Potential inter-plan cumulative effects are presented below:

- Conflicts between climate targets between various organisations - however, all higher order plans such as the CDP, RSES and the National Climate Action plan are aligned with the content of the LACAP. Adaptive language could provide the flexibility to allow localised augmentations to targets to increase or align with stakeholders within the lifetime of the LACAP.
- The LACAP provides for actions which support the delivery of development and infrastructure projects (in the form of flood relief, coastal protection, active travel, renewables, nature based solutions projects) which could contribute - if incorrectly managed - to cumulative impacts through construction related environmental effects (site run-off, dust, noise pollution etc.) in combination with development supported by other plans, including higher order plans (E.g., the CDP, LAPs, Framework for Alternative Fuel Infrastructure in Transport).
- Increased access to natural amenity sites could be facilitated by the combination of actions within the LACAP. Therefore, there could be cumulative effects related to this, particularly along waterways, in combination with other plans that support increased access to such sites.
- The LACAP supports a variety of actions relating to flood relief and alleviation projects, which could introduce catchment level cumulative impacts on water quality, flow and hydrological regime/characteristics in combination with other plans that support such projects (E.g., Flood Risk Management Climate Change Sectoral Adaptation Plan).
- The effects of multiple LACAP actions have the potential to combine to robustly support a shift to sustainable and active travel modes of transport in combination with other plans. This has the potential to generate a variety of cumulative positive environmental effects, including positive effects on local air quality, human health, biodiversity and climate.
- The variety of positive effects of associated with the implementation of plan actions - in parallel with actions defined in other plans and programmes that are likely to generate positive environmental effects - have the potential to combine and interact and have long-term and wide encompassing positive environmental effects on a variety of environmental components, including population and human health, climate, biodiversity, water quality and hydrology, traffic and transport, material assets, cultural heritage and landscape and visual amenity.
- The variety of positive climate related effects associated with plan actions - in parallel with actions defined in other plans, including higher order plans, that are likely to generate positive effects on climate (E.g., the CAP23) - have the potential to combine to create a larger and profound positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.

The potential cumulative environmental effects listed above have the potential to extend beyond the boundary of the local authority functional area.



8. MITIGATION MEASURES

Potential negative environmental effects that may occur as a result of the implementation of the LACAP (without considering any mitigation) have been identified in Section 8 of this report. The SEA Directive requires that mitigation measures to prevent, reduce and as fully as possible offset any potential significant negative environmental effects due to the implementation of a plan are defined. This section of the report describes the mitigation measures to ameliorate the potential negative environmental effects that may occur as a result of the implementation of the LACAP.

In this case, the following forms of mitigation have been adopted to ameliorate the negative environments of the LACAP and maximise potential positive effects of the LACAP:

- Mitigation through consideration of alternatives.
- Mitigation through integration of environmental considerations into the LACAP.
- Mitigation through consideration of development management standards/environmental protection objectives contained in the CDP.

8.1 Mitigation through consideration of alternatives

A number of alternatives were considered at an early stage in the process. The environmental effects of these alternatives were evaluated during the SEA process. The preferred LACAP was chosen over the other alternative options considered for the following reasons:

- **Alternative 1 (considered) - The Pareto Approach** - lead to some positive environmental effects, however it is less likely that this alternative would deliver the wide ranging and effective climate mitigation and adaptation action likely to result from implementation of the preferred LACAP. This alternative approach may also generate several negative environmental effects, which would not be counterbalanced by the potential positive environmental effects associated with the preferred LACAP.
- **Alternative 2 (considered) - The Holistic Approach** - and the preferred plan approach - The Holistic Approach - would both broadly deliver suitably wide ranging and effective climate action. These alternatives both have the potential to generate multiple positive environmental effects. Both alternatives have equal potential to generate some negative environmental effects.
- **Alternative 3 (preferred) - The Holistic and Participatory Approach** - was selected over the Alternative 2, the Holistic Approach, however as it has the best potential to deliver effective climate mitigation and adaptation action and positive environmental effects, given its strong community engagement emphasis, which supports better participation in climate action at community level.



8.2 Mitigation through integration of environmental considerations into the LACAP

The plan making process was carried out in parallel with the SEA and AA processes. Regular communication and interaction took place between the environmental assessment team and the plan making team. Environmental considerations that came to light during the SEA and AA processes, including consultation processes, were regularly communicated to the plan making team during the plan making process. As necessary, environmental mitigation measures to ameliorate the potential negative environmental effects of implementing the LACAP were developed and then integrated into the LACAP. Much of the environmental mitigation was embedded in the LACAP early on in the process as a result of this. This process was carried out in an iterative manner to ensure optimal plan making and environmental outcomes. Environmental considerations were also integrated into the plan so as to facilitate maximising identified positive environmental effects of the LACAP.

Mitigation measures were suggested that maximise the co-benefits of climate action for other environmental components such local air quality, human health, biodiversity, water quality and other interrelated areas (i.e., win-win solutions).

Additional text clarifying environmental protection related obligations and environmental enhancement opportunities has been attached to a variety of defined actions in the LACAP. This text has been shaped to ensure that environmental considerations are appropriately taken into account during plan implementation. This text has also been shaped to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects. These text additions are presented in Table 8-1.

Several environmental governance principles were established to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects. These environmental governance principles shall underpin and guide plan implementation and shall apply to and be integrated into all actions/activities which result due to the implementation of the LACAP. These principles are defined in Table 8-2.

For clarity and succinctness, only the defined mitigation measures have been presented in this section of the report. The reader is asked to refer to Appendix 3.2 - Detailed Evaluation of Environmental Effects of LACAP Implementation, for an understanding of the potential environmental effects associated with the actions and opportunities which are being mitigated (in the case of negative environmental effects) or maximised (in the case of positive environmental effects).

These environmental mitigation measures to be integrated into the LACAP will prevent, reduce and fully offset any potential significant negative environmental effects, and will maximise potential environmental benefits and co-benefits of the LACAP.

Due to the inter-relationship between various environmental components, environmental mitigation measures defined for one component can also serve to benefit another environmental component.



Table 8-1: Proposed Environmental Mitigation Measures - Additional text to be included in plan actions clarifying environmental protection related obligations and environmental enhancement opportunities

LACAP Action Reference	LACAP Action	Mitigation Measure
1.23	County Council investment in partnership for renewable energy projects where a suitable project is identified	Attach the following text to the action: Promote - through control or influence as appropriate - the carrying out of such projects in a manner that has due regard to environmental sensitivities such as biodiversity, European sites, landscape and visual amenity and sensitive human receptors.
1.24	Apply for Pathfinder funding and deliver energy projects and continue to apply for Better Energy Community funding	Attach the following text to the action: Apply for Pathfinder funding and deliver energy projects, having due regard to environmental sensitivities such as biodiversity, European Sites and sensitive human receptors. Continue to apply for Better Energy Community funding.
1.26	Develop a financial instrument to speed up the retrofit of social housing	Attach the following text to the action: whilst ensuring such projects are carried in a manner that has due regard to environmental sensitivities such as biodiversity, European site, sensitive human receptors and built heritage.
2.2	Replace fossil fuels with renewable fuel in WCCC Fleet	Attach the following text to the action: whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced.
2.3	Replace fossil fuel vehicles with Electric Vehicles (EV) in WCCC fleet	Attach the following text to the action: whilst ensuring appropriate end-of-life management practices are in place for Electric Vehicles under the ownership of local authorities.
2.4	Deliver the County EV charging strategy and use findings to apply for funding for the residential neighbourhood EV charging scheme in the areas that have been identified as needing charge points	Attach the following text to the action: Ensure development supported by the strategy is delivered in a manner that has due regard to environmental sensitivities (European sites, biodiversity, built heritage) and available grid capacity.
2.6	Deliver E-Mobility Hubs (Electric car, scooter and bike depot) where the public can rent vehicles and facilitate e-car clubs	Attach the following text to the action: having due regard to environmental sensitivities such as biodiversity, European sites, air quality, and water quality.
2.9	Collaborate with Active Travel & Area Engineer to identify and work with schools to run a programme for safe routes to school (School Streets). Aim for one school per year in the County.	Attach the following text to the action: Collaborate with Active Travel & Area Engineer to identify and work with schools to run a programme for safe routes to school (School Streets), having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage. Aim for one school per year in the County.
2.16	Review roundabouts for improvements: Dutch style	Attach the following text to the action: Ensure any consequential development has due regard to environmental sensitivities such as European sites, air quality, water quality, and biodiversity.
2.18	Integration of Sustainable Urban Drainage Systems and other nature-based solutions into plans	Attach the following text to the action: Ensure all SuDS related construction works are designed and implemented in a manner that does not result in the occurrence of significant adverse environmental effects.



LACAP Action Reference	LACAP Action	Mitigation Measure
2.19	Engage with Active Travel goals -secure cycle parking in main car parks, cycle lanes designed for daily commuter use (segregated if possible, curbing not plastic wands, design process to include consultation with cycling community)	Attach the following text to the action: Ensure any ancillary developments has due regard to environmental sensitivities such as European sites, air quality, water quality, and biodiversity.
2.26	Speed limit review as per Waterford Metropolitan Area Transport Strategy - 30km/hr on urban roads	Attach the following text to the action: having appropriate regard to environmental sensitivities such as traffic and transport constraints and aspects.
2.27	Survey of roads/bridges/infrastructures vulnerable to extreme weather events, produce vulnerability report and reinforce those structures	Attach the following text to the action: having due regard to the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations, and the need to not negatively impinge on any protected species or European sites.
2.33	Prepare and apply a protocol to enable and require a pre-set standard for 'Climate Proofing' including water sensitive urban design, Rainwater Management Plans, and Life Cycle Assessment of all local authority led plans, purchases and investment	Attach the following text to the action: ensuring the protocol has appropriate regard to environmental protection requirements and opportunities for promoting climate action co-benefits.
2.38	Support new privately owned regeneration through facilitating a cooperative community with a collective skillset to tackle renovation projects from within its own resources, building upon work conducted under the URDF	Attach the following text to the action: Promote with partners the carrying out of such projects in a manner that has due regard to environmental sensitivities, including biodiversity, European sites and built heritage.
2.44	Additional km of upgraded footpaths by 2029 - 23.16 in the County, 3km in the city	Attach the following text to the action: having due regard to environmental sensitivities such as the receiving water environment, and local air quality.
2.45	Additional km of new cycle lanes - 10.62km in the County, 33.92km in the city	Attach the following text to the action: having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality.
2.48	Cycle parking target - cycle parking for 5,000 bikes across the County	Attach the following text to the action: having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality.
2.49	Investigate renewable back-up power generation for servers vulnerable to power outages (Dungarvan)	Attach the following text to the action: having due regard to environmental sensitivities such as biodiversity, European sites, air quality and water quality.
2.53	Develop a County Heritage Plan and Biodiversity Plan with climate action as a cross-cutting theme/goal (Climate Proofed)	Attach the following text to the action: having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites and protect built heritage.
2.54	Undertake climate risk assessment of local authority owned built heritage assets to identify buildings likely to be impacted by extreme weather or erosion	Correct the following typo: Undertake climate risk assessment of local authority owned built heritage assets to identify buildings likely to be impacted by extreme weather or erosion.



LACAP Action Reference	LACAP Action	Mitigation Measure
2.5	Regionally develop projects to promote adaptive reuse of historic structures using exemplar retrofitting projects, life cycle assessment and carbon budgets to demonstrate climate value	Attach the following text to the action: having due regard to the need to not negatively impinge on any protected species that may be present in such buildings and European sites, and the need to appropriately conserve protected structures.
2.59	Targeting of social homes still using solid fuels, or older social homes, as priority of retrofitting program	Attach the following text to the action: Targeting of social homes still using solid fuels, or older social homes , as priority of retrofitting program. Deliver retrofitting projects in a manner that has due regard to environmental sensitivities such as protected species, biodiversity and sensitive human receptors.
2.60	Continue moving to central heating systems only	Attach the following text to the action: Deliver retrofitting projects in a manner that has due regard to environmental sensitivities such as protected species, biodiversity and sensitive human receptors.
2.61	Continue delivering the Croi Conaithe programme, bringing vacant homes back to use	Attach the following text to the action: Promote - through control or influence as appropriate - the carrying out of regeneration works in manner that has due regard to environmental sensitivities such as protected species, biodiversity, air quality and water quality.
2.64	Avoid fossil fuel heating systems and continue to replace coal and oil heating systems	Attach the following text to the action: Deliver retrofitting projects in a manner that has due regard to environmental sensitivities such as protected species, biodiversity and sensitive human receptors.
2.67	Upgrade at least 25% of social houses (E/F/G BER to BER B2 or higher). This figure is based on the current funding allocation and may increase.	Attach the following text to the action: Upgrade at least 25% of social houses (E/F/G BER to BER B2 or higher), having due regard to environmental sensitivities such as protected species, biodiversity, air quality and water quality. This figure is based on the current funding allocation and may increase.
2.69	50% improvement in energy efficiency across all Council operations	Attach the following text to the action: whilst having due regard to environmental sensitivities such as visual amenity, water and air quality, and biodiversity related sensitivities.
2.70	Phase out fossil-fuel based boilers from Council buildings by 2025.	Attach the following text to the action: whilst having due regard to environmental sensitivities such as visual amenity, sensitive human receptors and biodiversity related sensitivities.
2.71	Replace streetlighting with LED energy efficient equivalents and enable lighting controls to save energy	Attach the following text to the action: while ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects on biodiversity.
2.72	Addition of renewable energy to Council buildings that have a floor area of greater than 250m2 and do not have conservation restrictions	Attach the following text to the action: whilst having due regard to environmental sensitivities such as visual amenity and biodiversity related sensitivities.
2.74	Assess Council land for Renewable Energy suitability. A target for example of 5MWh of installed capacity across the County developed in conjunction with a community (s) would require a solar farms of a 10ha size could be achieved.	Attach the following text to the action: Ensure planning and environmental constraints are considered during this assessment.



LACAP Action Reference	LACAP Action	Mitigation Measure
3.1	Complete county habitat and ecosystem service surveys with a focus on carbon sinks and stores and identify sites suitable for restoration (wetlands, woodlands, sand dunes, saltmarsh and sea grass beds).	Attach the following text to the action: having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive. This plan shall be developed by a competent ecology team and shall have due regard to the need to appropriately manage these habitats.
3.2	Develop a County Biodiversity Plan with climate action as a cross-cutting theme/goal. Use the County Biodiversity Plan as a vehicle to highlight a range of biodiversity opportunities that can be taken up at farm level with particular emphasis on the new ECO scheme. Highlight schemes for biodiversity opportunities available to farmers	Attach the following text to the action: having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive. This plan shall be developed by a competent ecology team and shall have due regard to the need to appropriately manage these habitats.
3.5	Develop nature-based flooding approaches in collaboration with relevant stakeholders. Assessment made at whole-catchment level (catchment as the management unit). Prioritise delivery of Catchment Flood Risk Assessment and Management (CFRAM)	Attach the following text to the action: Ensure due regard is given to the need to promote Sustainable Drainage Systems, and environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology.
3.12	Deliver a yearly increase in tree planting on local authority lands and in private and public	Attach the following text to the action: Deliver a yearly increase in native tree planting on local authority lands and in private and public
3.16	Identify sites and opportunities to work with other agencies and communities on restoration of water levels and 'slow the flow' measures to mitigate flood risk.	Attach the following text to the action: Promote - through control or influence as appropriate - the carrying out of development supported by this action in a manner that has due regard to opportunities to promote nature-based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.
3.17	Deliver on a yearly increase in the application of Blue-Green Infrastructure, Nature Based-Solutions (NBS) and Integrated Rainwater Management in local authority, private and public projects. Collate a database and spatial map to track progress.	Attach the following text to the action: Deliver on a yearly increase in the application of Blue-Green Infrastructure, Nature Based-Solutions (NBS) and Integrated Rainwater Management in local authority, private and public projects, having due regard to environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value. Collate a database and spatial map to track progress.
3.19	Prepare strategic wildfire management plan for high-risk areas	Attach the following text to the action: Ecological expertise shall be sought during plan preparation. The plan and shall have due regard to the need to appropriately protect important habitats.
3.20	Investment in increased green space in urban areas including a park of regional significance in Waterford city	Attach the following text to the action: ensuring local authority led development is carried out in a manner that has due regard to relevant planning and environmental protection requirements.



LACAP Action Reference	LACAP Action	Mitigation Measure
3.22	Act on the findings of the Copper Coast stabilisation report	Attach the following text to the action: having due regard to environmental sensitivities associated with coastal areas such as the receiving marine environment, biodiversity, European sites, recreation, and amenity value.
3.26	Support and inform a climate-proofing programme for natural water resources to manage flooding at the catchment level. Through advising the farming community and running information campaigns.	Attach the following text to the action: The programme shall have due regard to the protection of biodiversity and European sites and avoidance of habitat fragmentation, as well as the maintenance and improvement of water quality in line with the aims of the Water Framework Directive.
3.27	Increase the amount of permeable spaces in the County. Ensure that new housing and streetscapes incorporate permeability (Nature Based Solutions and Sustainable Urban Drainage Systems)	Attach the following text to the action: Ensure all SuDS related construction works are designed and implemented in a manner that does not result in the occurrence of significant adverse environmental effects, such as the receiving water environment, biodiversity, European sites, visual amenity, recreation and amenity value and cultural heritage considerations.
4.1	Climate proofing of Community Funded Projects (e.g., Town & Village) (Sustainability and Climate Change scoring on grant assessment)	Attach the following text to the action: ensuring the protocol has appropriate regard to environmental protection requirements, environmental sensitivities such as European Sites, biodiversity and opportunities for promoting climate action co-benefits.
4.5	Renewable Energy Use for festivals. Review affordability of HVO generators from local suppliers. Review infrastructure needed to put in mains power for future festivals.	Attach the following text to the action: Renewable Energy Use for festivals. Review affordability of HVO generators from local suppliers, whilst ensuring energy/fuel used is sustainably sourced. Review infrastructure needed to put in mains power for future festivals - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities.
4.29	Prepare feasibility study to facilitate a pilot Anaerobic Digester project in conjunction with other stakeholders (farmers, agri-business and others)	Attach the following text to the action: ensuring such a study as appropriate regard to planning and environmental constraints associated with the development of such a facility.
DZ 1.3	Develop a Carbon Neutral Community programme where we establish an energy cooperative in a pilot community and deliver renewable energy and energy efficiency solutions for homes and transport	Attach the following text to the action: Due regard shall be had to relevant planning and environmental protection criteria, including the need to protect European sites, when implementing this action.
DZ 1.4	Work on an area by area basis (City Centre, Ballybricken, Carrickpherish, Poleberry etc.) over a number of months to have a presence in the community to provide advice to the public and businesses while also delivering projects in Active Travel, Presentation, Roads, Climate Adaptation, Housing etc. To provide information on existing services and to collaborate with the community going forward to develop projects and source financing/funding. Breaking the Decarbonisation Zone plan down to manageable community actions	Attach the following text to the action: Due regard shall be had to relevant planning and environmental protection criteria, including the need to protect European sites, when implementing this action.



LACAP Action Reference	LACAP Action	Mitigation Measure
DZ 2.1	Sustainable Urban Drainage systems to be incorporated in street upgrades, Council building projects and private developments.	Attach the following text to the action: having due regard to environmental sensitivities such as European sites, biodiversity, air and water quality.
DZ 2.3	Work with 4 regions in the city (e.g., Ballybricken, Carrickpherish) to co-design with the community climate adaptation interventions - planting, SUDS, green roofs rainwater harvesting etc.	Attach the following text to the action: having due regard to environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.
DZ 2.6	Put in place a park of regional significance as per County Development Plan incorporating Nature Based Solutions to reduce flood likelihood	Attach the following text to the action: having due regard to environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and traffic and transport conditions.
DZ 2.7	Climate Adaptation measures to be incorporated into all Council developments going forward - larger downpipes, SUDS, Nature Based Solutions	Attach the following text to the action: having due regard to environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.
DZ 2.8	Implementing permeable surfaces (bioswales / rainbeds / pervious pavement) - requirement in new developments	Attach the following text to the action: having due regard to environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.
DZ 4.2	Deliver a 50% energy efficiency improvement in Council owned buildings	Attach the following text to the action: having due regard to environmental sensitivities such as landscape and visual amenity, European Sites, biodiversity, sensitive human receptors and the need appropriately conserve built and cultural heritage.
DZ 4.4	Work with partners to deliver a District Heating Scheme for Waterford City	Attach the following text to the action: having due regard to environmental sensitivities such as Biodiversity, European sites, water quality and hydrology, and air quality.
DZ 4.6	Upgrade of public buildings to BER B	Attach the following text to the action: having due regard to environmental sensitivities such as Biodiversity, European sites, and the need to appropriately conserve built and cultural heritage.
DZ 4.7	Do a review of Council owned land in the city for solar suitability. Develop solar energy projects. Study to be done in conjunction with SETU	Attach the following text to the action: Do a review of Council owned land in the city for solar suitability. Ensure such a review has appropriate regard to planning and environmental considerations. Develop solar energy projects - ensuring such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects. Study to be done in conjunction with SETU.
DZ 4.8	Deploy solar energy on all Council buildings with a floor area of greater than 250m2	Attach the following text to the action: having due regard to environmental sensitivities such as landscape and visual amenity, European Sites, biodiversity, sensitive human receptors and the need appropriately conserve built and cultural heritage.



LACAP Action Reference	LACAP Action	Mitigation Measure
DZ 4.9	Replace inefficient streetlights with LEDs	Attach the following text to the action: while having due regard for the impact the spectrum of light used will have on protected nocturnal species such as bats.
DZ 4.10	Development of a Smart City District on O Connell Street and the Quays (centralised at the Munster Express Building) that will use sensors to maximise energy production, efficient energy use, report risk of drain flooding and communicate air quality impacts	Attach the following text to the action: Ensure due regard is had to environmental sensitivities during development processes.
DZ 4.12	Through the Croí Conaithe scheme bring existing buildings up to a high energy efficient standard ensuring occupancy rates are high in our city centre	Attach the following text to the action: having due regard to environmental sensitivities such as protected species associated with such buildings, European sites, biodiversity, and the need to appropriately conserve built and cultural heritage.
DZ 4.13	Removal of fossil fuel heating from all Council buildings	Attach the following text to the action: having due regard to environmental sensitivities such as protected species associated with such buildings, European sites, biodiversity, and the need to appropriately conserve built and cultural heritage.
DZ 4.14	In conjunction with the Local Enterprise Office compile a strategy for developing the Geothermal Industry in Waterford City Along with conducting a feasibility study for the city based on GSI recommendations	Attach the following text to the action: Ensure such a study has appropriate regard to planning and environmental considerations and constraints.
DZ 4.16	Update Renewable Energy Strategy, within City and County Development Plan	Attach the following text to the action: Ensure planning and environmental protection related factors are appropriately considered in the strategy.
DZ 4.18	North Quays to be an exemplary example of sustainable energy technologies	Attach the following text to the action: having due regard planning and environmental considerations.
DZ 4.19	Develop a "Hydrogen Energy Strategy" for Waterford City and resource implementation of aspects of the National Strategy that can be advanced in Waterford	Attach the following text to the action: Ensure planning and environmental protection related factors are appropriately considered in the strategy.
DZ 4.20	Exploit Waterford's Shallow Geothermal opportunities by including Geothermal as a heat source for a District Heating and by including Geothermal heating where suitable in Council redevelopment projects	Attach the following text to the action: Progress development supported by this action in a manner that maximizes climate action co-benefits and accords with relevant environmental protection requirements.
DZ 4.21	Develop Solar Car port projects (1MW) and a solar farm within the city (19MW)	Attach the following text to the action: having due regard to environmental sensitivities such as landscape and visual amenity, European Sites, biodiversity, sensitive human receptors and the need appropriately conserve built and cultural heritage.
DZ 4.22	Investigate the requirements for large scale installation of low carbon sources of heating (air/ground/water source heat pumps), using council owned homes as a test bed in partnership with grid operators and supply chains	Attach the following text to the action: having due regard to planning and environmental protection considerations associated with such projects.



LACAP Action Reference	LACAP Action	Mitigation Measure
DZ 6.1	Investigate the possibility of creating a Green Bond for the city which can be used to invest in renewable energy	Attach the following text to the action: Investigate the possibility of creating a Green Bond for the city which can be used to invest in appropriately planned renewable energy.
DZ 2.10	Plant 100,000 trees within the Metropolitan area	Attach the following text to the action: Plant 100,000 native trees within the Metropolitan area
DZ 2.11	Carbon sequestration through detailed tree / meadow planting / growing, rewilding, soil management, waterways and wetland planning, informed by habitat mapping, opportunity mapping and tree canopy surveys	Attach the following text to the action: These actions shall be overseen by a competent ecology team and shall have due regard to the need to appropriately manage these habitats.
DZ 8.2	Integration of renewable energy, EV charging, active travel infrastructure into new developments	Attach the following text to the action: having due regard to opportunities to promote climate action co-benefits, and relevant planning and environmental protection requirements.
DZ 8.3	In URDF projects facilitate a city centre cooperative community with a collective skill set that can tackle renovation projects from within its own resources. This work should have a focus on Circular Economy, making tools and skills available for people to do up properties that they can live in	Attach the following text to the action: whilst promoting the need for supported projects to adhere to relevant planning and environmental protection requirements.
DZ 5.8	Continue to engage with businesses encouraging them to save energy with the Commercial Energy Rates Discount Scheme	Attach the following text to the action: whilst promoting the need for support projects to adhere to relevant planning and environmental protection requirements.
DZ 10.3	Install 33.9 Km of cycle lanes	Attach the following text to the action: whilst having due regard to environmental sensitivities such as European sites, biodiversity and water and air quality.
DZ 10.4	Review public parking and staff parking to see the impact of car pooling, car sharing, public transport and active travel to identify areas where different usages could be applied for those spaces	Attach the following text to the action: having due regard to opportunities to promote climate action co-benefits, nature-based solutions, SuDS, and relevant environmental protection requirements.
DZ 10.6	Install 3 Km of upgraded footpaths along with maintaining existing footpaths	Attach the following text to the action: whilst having due regard to environmental sensitivities such as European sites, biodiversity and water and air quality.
DZ 10.14	Complete an EV charging strategy and apply for the Neighbourhood Charging Fund for the required number of chargers and ensure that all new plannings for developments include the legally mandated EV charger requirement	Attach the following text to the action: Ensure development supported by the strategy is delivered in a manner that has due regard to environmental sensitivities (European sites, biodiversity, built heritage) and available grid capacity.
DZ 10.15	Deliver at least 5 Safe Routes to Schools campaigns at City Schools - this will depend on school demand	Attach the following text to the action: Ensure any ancillary development has due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality.
DZ 10.17	Review of bus lanes in the city and extension as part of the Bus Connects programme	Attach the following text to the action: having due regard to transport planning related factors.



LACAP Action Reference	LACAP Action	Mitigation Measure
DZ 10.28	Delivery of Park and Ride -	Attach the following text to the action: having due regard to planning and environmental protection considerations, including transport planning factors.
DZ 10.1	Completion of the Sustainable Transport Bridge between Ferrybank and Waterford City	Attach the following text to the action: subject to planning and environmental protection related requirements.
DZ 10.30	Continue to work with the NTA to provide infrastructure for the bus network - the city bus network will be electrified and extended within this period with input from the Council	Attach the following text to the action: Promote integrated planning and consultation and adherence to planning and environmental protection requirements, including the appropriate consideration of available grid capacity, during projects supported by this action.

Table 8-2: Proposed Environmental Mitigation Measures - Environmental Governance Principles suggested for inclusion in the LACAP - specifically the LACAP implementation section

Promote climate action projects that support and maximise environmental co-benefits, such as biodiversity protection and enhancement; improved air, water or soil quality; or enhanced recreation, amenity and cultural heritage value, to ensure win-win benefits are gained.
Support or facilitate climate action related projects and initiatives which seek to make improvements in soil structure, management and health by increasing soil organic carbon - which will create the environmental co-benefits of improving flood resilience by enhancing water holding capacity of soils and increasing the level of GHG sequestration associated with land use functions.
Ensure local authority development underpinned or supported by plan actions is planned and implemented in a manner that appropriately considers the potential for environmental co-benefits, potential environmental impacts and environmental protection requirements. No local authority climate action related development project that is likely to have significant negative effects on the receiving environment shall be supported.
Promote - through control or influence as appropriate - the carrying out of flood resilience measures underpinned by plan actions in a manner that supports climate action-biodiversity related co-benefits, and which has due regard for the protection and enhancement of rare, protected or important habitats and species.
Promote the carrying out of climate action related projects supported by the plan in a manner that supports climate action-cultural heritage co-benefits, and which has due regard to cultural, archaeological or architectural features and sensitivities.
Promote the carrying out of climate action related projects underpinned by the plan in a manner that supports climate action water quality co-benefits, and the achievement of Water Framework Directive objectives.
Promote climate action projects that support protected trees, hedgerows and other habitats such as wetlands, flood zones which contribute to green infrastructure.
Support opportunities to improve ecological connectivity of non-designated habitats and sites to improve overall ecosystem resilience and functioning while supporting climate action within the county.
Ensure local authority projects supported by plan actions have taken the necessary precautions to identify and manage invasive species, particularly with regard to Schedule III species. No local authority climate action related development project that is likely to cause the spread of invasive species listed in Schedule III shall be supported.
Support opportunities to promote peatland restoration, rehabilitation and maintenance while achieving climate targets through the implementation of the climate actions within the plan.



8.3 Mitigation through consideration of environmental protection objectives contained in the County Development Plan

In addition to the environmental mitigation measures integrated into the LACAP, the development management standards and environmental protection measures defined in the CDP will serve to mitigate the environmental effects of any development proposals supported by the LACAP. These development management standards/environmental protection measures have been defined for the express purpose of ensuring proper planning and sustainable development in the County. The CDP has been subject to its own SEA and AA. The LACAP has been prepared having appropriate regard to the policies and objectives contained in the County Development Plan.

8.4 Conclusion

The reasonable alternative evaluation presented in Section 6 and summarised in Section 8.1 has resulted in the development of a LACAP that achieves the best environmental outcomes in comparison to other reasonable alternatives considered.

The adoption of the mitigation measures to be integrated into the LACAP, in combination with the continued adoption of the development planning and control related environmental protection measures defined in the CDP will prevent, reduce and as fully as possible offset any potential negative environmental effects due to the implementation of the LACAP. No further mitigation measures are required for the LACAP.



9. POST DRAFT PLAN CONSULTATION REVISIONS

This document is the final SEA Environmental Report produced on adoption of the LACAP. An earlier draft version of this report has been updated having regard to the consultation submissions made during the SEA consultation period, recommendations made in the Chief Executive (CE) Report on consultation submissions, and the revisions made to the original draft version of the LACAP that was put on display for consultation. The updates made to the report were clerical or minor and non-material in nature and have not changed the parameters of the environmental assessment undertaken or the environmental mitigation defined.

The Plan revisions arising from the consultation process, the CE Report, and the post consultation plan-making process were screened for SEA and AA. The SEA Screening Report and AA Screening Report for the post consultation Plan revisions are presented in Appendix 4 and Appendix 5 respectively. The Plan revisions were determined to be non-material and did not introduce any additional environmental effects not previously considered and mitigated during the SEA and AA processes.

An SEA Statement will now be prepared on how the SEA process shaped the content of the final plan and SEA documentation.



10. MONITORING MEASURES

The SEA Directive requires that the environmental effects of the implementation of a plan are monitored in order *'to identify at an early stage unforeseen effects, and to be able to undertake appropriate remedial action.'*

A series of indicators and targets were established for identified SEOs to enable ongoing monitoring and measurement of LACAP implementation performance, the environmental effects of the implementation of the LACAP and the efficacy of environmental mitigation measures. Such monitoring will be carried out regularly to support plan implementation.

SEO indicators are simple and effective quantifiable indicators used to measure the environmental effects of implementing the LACAP and the progress of SEO objectives and targets. SEO targets set focussed, measurable aims and thresholds that the LACAP can support the achievement of.

Waterford City and County Council are responsible for implementation of the SEA monitoring programme. The environmental effects (including positive, negative and cumulative effects) of LACAP implementation will be monitored once every year over the course of the LACAP's five-year lifetime. This monitoring will be carried out by the Climate Action section of Waterford City and County Council who will report on progress and performance to the relevant SPC annually. A monitoring report will be prepared to document monitoring outcomes. This report shall be made available for public inspection.

It is recommended that LACAP monitoring and review is undertaken in parallel with CDP monitoring and review processes for efficiency and given that similar data sets will be used to measure the progress of each plan.

Where monitoring identifies that the implementation of the LACAP is having a significant negative environmental effect, an in-depth review of the LACAP should take place and the LACAP should be updated in a manner that satisfactorily mitigates these environmental effects (i.e., through the adoption of additional environmental mitigation measures.). Similarly, where monitoring indicates that potential positive environmental effects associated with LACAP implementation are not being adequately realised, the LACAP should be reviewed and updated in a manner that supports the realisation of all potential positive environmental effects, having regard to the overall vision and high-level objectives of the LACAP.

The SEA Monitoring Programme established for the LACAP is contained in Table 10-1. This monitoring programme has been developed in accordance with EPA guidelines entitled 'Guidance on SEA Statements and Monitoring' (2020). The monitoring programme includes detail on the indicators, targets and data sources used to monitor and measure progress.

A stand-alone monitoring report on the significant environmental effects of the implementation of the LACAP will be prepared in advance of the plan review process. 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 and, if necessary, the carrying out of remedial action.



Table 10-1: SEA Monitoring Programme

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.	Lower-level plan and project accordance with the plan.	Require all lower-level plans and projects have appropriate regard to and appropriately support all action and development proposals defined in the Plan. Ensure planning policy and climate action policy is aligned.	Review of Local Area Plans. Internal monitoring of likely significant environmental effects of development projects. Review of lower-level plan SEA documentation.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.	Number of spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan.	No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan.	Consultation with the Health Service Executive (HSE)/Health Atlas Ireland and the EPA.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.	Compliance of action and development supported by the plan with policies and land use objectives protective/supportive of economic development in the county defined in the County Development Plan (CDP) or County Local Area Plans.	No contravention of policies and land use objectives protective/supportive of economic development in the county defined in the CDP or County Local Area Plans. Planning consent for development proposals supported by the plan only to be granted where development will be carried out in accordance with proper planning and sustainable development.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of likely significant environmental effects of development projects.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.	Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP. Condition of habitats impacted by climate change (Area km ² /length metres).	No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP. Ensure no habitats are impacted by the effects of climate change. Ensure no reduction in the number of geographic distribution of species as a result of climate change effects.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of compliance with the County Biodiversity Action Plan. Internal monitoring of likely significant environmental effects of development projects.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>Number and geographical distribution of Species or Species population trends impacted by climate change.</p> <p>Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p>	<p>No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p> <p>Planning consent for development proposals supported by the plan only to be granted where development complies with policy supporting biodiversity protection and enhancement.</p>	
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species ⁷¹ .	Condition of European Sites and annexed species.	No adverse impacts on the condition of European Sites and Annexed habitats and species as a result of plan implementation.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with the NPWS.</p> <p>Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive.</p> <p>Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the Birds Directive under Article 12.</p> <p>Review of NPWS publications regarding the status of European sites.</p>

⁷¹ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.	<p>Condition of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora.</p> <p>Linear meters of riparian corridors enhanced with native planting.</p> <p>Fragmentation or breaks in continuity of habitats and loss of wildlife corridors, stepping stones and connectivity (km²).</p> <p>Number of developments consented that have significant greenspace proposals.</p>	<p>No adverse impacts on the condition of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora as a result of plan implementation.</p> <p>Increase linear metres of riparian corridor enhanced with native planting.</p> <p>Reduce habitat fragmentation or breaks.</p> <p>Increase number of developments consented that have significant greenspace proposals.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Mapping of LR important habitats and species as part of the County Biodiversity Plan.</p>
	B4	To avoid or minimize significant impacts on semi-natural habitats, species, environmental features, or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation; and to comply with the Wildlife Acts 1976-2012 with regard to listed species.	<p>Condition of semi-natural habitats, species, environmental features or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation.</p> <p>Status of listed species in the Wildlife Acts 1976 - 2012.</p>	<p>No adverse impacts on condition of semi-natural habitats, species, environmental features or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation, as a result of plan implementation.</p> <p>No adverse impacts on listed species in the Wildlife Acts 1976 - 2012 as a result of plan implementation.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Mapping of LR important habitats and species as part of the County Biodiversity Plan.</p>
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.	<p>Compliance of development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP.</p> <p>No. of developments consented that have significant greenspace proposals.</p>	<p>No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP.</p> <p>Increase number of developments consented that have significant greenspace proposals.</p> <p>Increase quantum of improved biodiversity areas.</p>	<p>Internal monitoring of compliance with CDP Policy Objectives.</p> <p>Internal monitoring of compliance with the County Biodiversity Action Plan.</p> <p>Internal monitoring of likely significant environmental effects of development projects.</p>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			Improved biodiversity areas (Area km ² /length metres). Compliance of development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.	No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan. Planning consent for development proposals supported by the plan only to be granted where development complies with policy supportive of biodiversity protection and enhancement.	Mapping of LR important habitats and species as part of the County Biodiversity Plan.
Landscape & Visual Amenity	L1	Avoid or, minimise impacts to statutory landscape designations defined in the CDP.	Status of Landscape Character Areas, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects. Number of developments consented that result in avoidable adverse impacts on Landscape Character Areas, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects. Number of areas in the local authority functional area designated for their landscape character or visual amenity.	All action and development proposals supported by the plan must comply with policy objectives relating to the protection of Landscape Character Areas, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects defined in the CDP. No development supported by the plan should have an adverse impact on Landscape Character Areas, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of likely significant environmental effects of development projects. Review of future iterations of the Landscape Character Assessment.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.	Number of developments consented that result in avoidable adverse visual impacts on residential receptors or other sensitive visual receptors. Number of areas in the local authority functional area designated for their visual amenity.	No development supported by the plan should have a significant adverse visual impact on residential receptors or other sensitive visual receptors. All development supported by the plan should adhere to relevant Development Management Standards defined in the CDP, in particular standards defined in relation to physical and visual impacts.	Internal monitoring of likely significant environmental effects of development projects. Review of future iterations of the Landscape Character Assessment.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).	<p>Percentage of features contained in the RMP (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan.</p> <p>Percentage of features contained in the RPS and NIAH (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan.</p>	<p>No features contained in the RMP (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan.</p> <p>No features contained in the RPS and NIAH (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media</p> <p>Review of Heritage Plan environmental effect monitoring</p>
Soils	S1	Avoid or minimise effects on mineral resources or soils.	Number of instances of significant adverse impacts on mineral resources or soils occurring, including the pollution, loss or degradation of mineral resources or soils, as a result of action and development supported by the plan.	No instances of significant adverse impacts on mineral resources or soils occurring as a result of action and development supported by the plan.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with Geological Survey of Ireland and review of published data on the soils environment.</p>
Land Use	LU1	Avoid or minimise effects on existing land use.	Number of instances of significant adverse impacts on existing land use as a result of plan implementation.	No instances of significant adverse impacts on existing land use as a result of plan implementation.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Review of Land Use, Land Use Change and Forestry related Greenhouse Gas emissions calculated in the Baseline Emission Inventory.</p>
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.	<p>% change in modal split.</p> <p>Length of new sustainable transport routes developed.</p>	<p>Reduction in private car use.</p> <p>Extension and improvement of the sustainable transport network in the plan area.</p>	<p>Central Statistics Office (CSO) Population data - Commuting in Ireland.</p> <p>Internal monitoring of length of new sustainable transport routes developed.</p>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	AQN2	Avoid or minimise effects on local air quality.	<p>Number of developments consented that result in avoidable adverse air quality impacts on sensitive receptors.</p> <p>Number of exceedances of ambient air quality standards in the County, as monitored under the EPA's National Ambient Air Quality Monitoring Network.</p> <p>Improvements in air quality status in the county.</p>	<p>No development supported by the plan should have a significant adverse air quality impact on sensitive receptors.</p> <p>All development supported by the plan should adhere to relevant Development Management Standards defined in the CDP relating to the protection of air quality.</p> <p>Minimise ambient air quality standard exceedances in the County.</p>	<p>Internal monitoring of likely significant environmental effects of development projects. Consultation with the EPA.</p> <p>Review of EPA Air Quality Monitoring undertaken in the County.</p> <p>Review of EPA annual 'Air Quality in Ireland' Report</p>
	AQN3	Avoid or minimise adverse noise impacts.	<p>Number of sensitive receptors exposed to noise nuisance.</p>	<p>No sensitive receptors exposed to nuisance noise in the County.</p>	<p>Internal monitoring of likely significant environmental effects of development projects. Monitoring of internal noise complaint investigations undertaken. Consultation with the EPA.</p>
Water	W1	Maintain and/or improve, the quality and status of surface waters.	<p>Status of surface water bodies as reported by the EPA Water Monitoring Programme for the Water Framework Directive (WFD)</p> <p>Status of bathing waters as monitored under the Bathing Water Directive.</p> <p>Number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.</p>	<p>Number of Pollution Incidents detected due to poor bathing water quality results.</p> <p>Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status.'</p> <p>No deterioration in the status of any bathing waters, having appropriate regard to bathing water mandatory and guidelines values defined in the Bathing Water Directive.</p> <p>Implementation of the objectives of the second cycle of the national River Basin Management Plan.</p>	<p>EPA surface water monitoring data and reports.</p> <p>EPA bathing water monitoring data and reports.</p> <p>Review of environmental quality data detailed in the EPA Maps Application</p>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
				Increase in number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.	
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.	Status of groundwater bodies as reported by the EPA National Groundwater Monitoring Programme for the WFD.	No deterioration in the status of groundwater quality, having appropriate regard to Groundwater Quality Standards and Threshold Values defined under Directive 2006/118/EC.	EPA groundwater monitoring data and reports. Review of environmental quality data detailed in the EPA Maps Application
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.	Number of instances of significant adverse impact on surface water or groundwater bodies resulting in a reduction in water quality or the ability of a water body to achieve 'good' water quality status. Number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.	No instances of significant adverse impact on surface water or groundwater bodies resulting in a reduction in water quality or the ability of a water body to achieve 'good' water quality status. Increase in number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.	Internal monitoring of likely significant environmental effects of development projects. Consultation with the EPA.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.	Number of incompatible developments (supported by the plan) consented within flood risk areas.	Minimise developments (supported by the plan) granted permission on lands which pose - or are likely to pose in the future - a significant flood risk, having appropriate regard to the Flood Risk Management guidelines.	Internal monitoring of development projects granted planning consent.
	W5	Prevent impact upon drinking water quality	Number of non-compliances with Drinking Water Quality Standards defined in the European Union (Drinking Water) Regulations 2023.	No non-compliances with Drinking Water Quality Standards defined in the European Union (Drinking Water) Regulations 2023.	EPA Drinking Water Quality Reports. Review of environmental quality data detailed in the EPA Maps Application



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure	Number of incompatible developments (supported by the plan) adversely affecting built/amenity assets and infrastructure.	No incompatible development (supported by the plan) adversely affecting built/amenity assets and infrastructure.	Internal monitoring of likely significant environmental effects of development projects.
	MAI2	Avoid or minimise effects on existing and (where known) planned infrastructure.	Number of incompatible developments (supported by the plan) adversely affecting existing or planned infrastructure, including water supply, wastewater management, energy and transport infrastructure.	No incompatible development (supported by the plan) adversely affecting existing or planned material assets infrastructure.	Internal monitoring of likely significant environmental effects of development projects, including monitoring of effects on other future planned or committed material asset infrastructure projects. Consultation with Irish Water, Gas Networks Ireland, ESB Networks and Transport Infrastructure Ireland.
	MAI3	Promote sustainable transportation.	% change in modal split. Kilometres of permanent segregated cycling network. Kilometres of permanent integrated cycling network. Number of Electric Vehicle charging points in the county. Total Area of road reallocated for sustainable alternatives (m ²).	Percentage increase in the number of public transport users in the County Increase kilometres of permanent segregated cycling network. Increase kilometres of permanent segregated cycling network. Increase number of Electric Vehicle charging points in the county. Increase Total Area of road reallocated for sustainable alternatives.	CSO Population data - Commuting in Ireland. Internal monitoring of length of new sustainable transport routes developed.
	MAI4	Promote sustainable waste management.	Tonnes of hazardous waste received at Council Waste Management Facilities annually. Tonnes of W.E.E.E. waste received at Council Waste Management Facilities annually.	Increase waste recycling in the County. Reduce waste generation in the County.	EPA Waste Statistics. Consultation with the EPA.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>Tonnes of Bulky waste received at Council Waste Management Facilities annually.</p> <p>Tonnes of garden waste received at Council Waste Management Facilities annually.</p>		
	MAI5	Promote sustainable water use and drainage management.	<p>Level of water use in the County.</p> <p>Compliance with Sustainable Drainage System (SuDS) related development management standards defined in the CDP.</p>	<p>Reduced water use in the county.</p> <p>All development (supported by the plan) must comply with SuDS related development management standards defined in the CDP.</p>	<p>CSO water consumption data.</p> <p>Internal monitoring of flood risk associated with development projects and development project compliance with relevant flood risk and management related development management standards.</p>
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.	Visitor trips to local authority functional area	Stable or increasing number of visitor trips to local authority functional area	Fáilte Ireland Data on Tourism Performance
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.	<p>Level of Greenhouse Gas (GHG) emissions in the County.</p> <p>Level of renewable energy infrastructure in the County.</p>	<p>Reduce GHG emissions associated with the Energy sector in the County.</p> <p>Increase the level of renewable energy infrastructure in the County.</p>	<p>EPA National Emission Inventory.</p> <p>Baseline Emission Inventory for the County.</p> <p>Megawatt hour (MWh) output from renewable energy infrastructure in the county.</p>
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.	Level of GHG emissions in the County	Reduce GHG emissions for all sectors in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.	<p>Level of GHG emissions in the County.</p> <p>Level of GHG emissions in the Decarbonising Zone.</p> <p>Net addition of tree cover added.</p>	<p>Reduce GHG emission in the County to Net Zero.</p> <p>Reduce Decarbonising Zone GHG emissions to Net Zero.</p>	<p>EPA National Emission Inventory.</p> <p>Baseline Emission Inventory for the County.</p> <p>Baseline Emission Inventory for the Decarbonising Zone.</p>



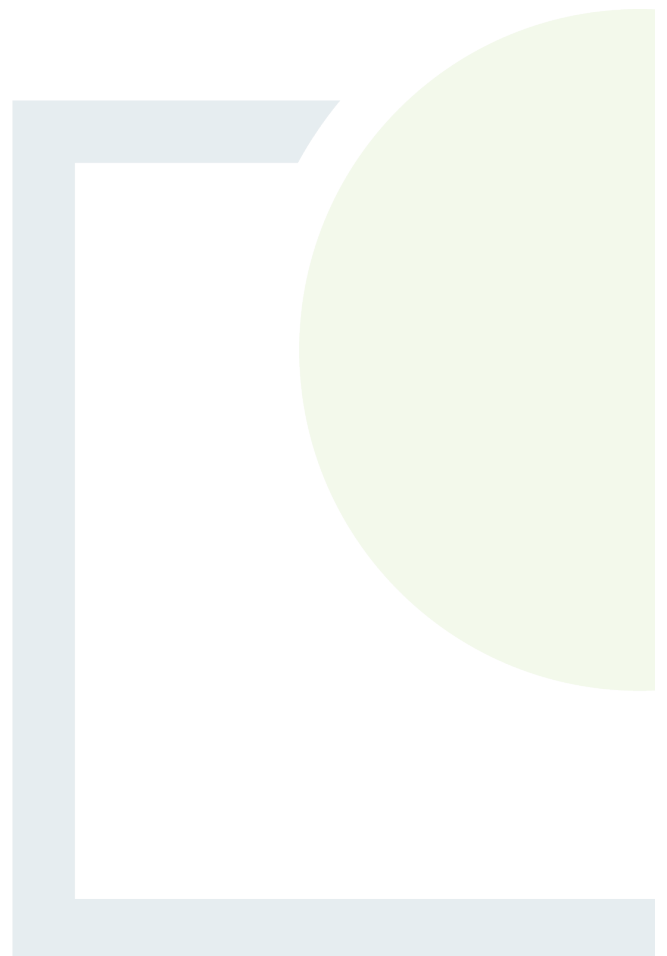
Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
				Increase level of tree cover in the County.	
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.	Level of GHG emissions in the Decarbonising Zone.	Reduce Decarbonising Zone GHG emissions to Net Zero.	Baseline Emission Inventory for the Decarbonising Zone.
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change	Number of blue and green infrastructure measures included as part of development projects that have been granted planning consent.	Increase the number of blue and green infrastructure measures included as part of development projects that have been granted planning consent.	Review of granted planning consents.



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 1

Relationship of the LACAP
with other relevant Plans and
Programmes



This appendix is not intended to be a full and comprehensive review of inter-related Plans or Programmes, EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive, and it is recommended to consult the Plan or Programme, Directive or Regulation to become familiar with the full details of each.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Level			
SEA Directive (2001/42/EC)	<ul style="list-style-type: none"> Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment. 	<ul style="list-style-type: none"> Carry out an environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission. Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects. Inform relevant authorities and stakeholders on the decision to implement the plan or programme. Issue a statement to include requirements detailed in Article 9 of the Directive. Monitor and mitigate significant environmental effects identified by the assessment. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	<ul style="list-style-type: none"> Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment. Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is 	<ul style="list-style-type: none"> All projects listed in Annex I are considered as having significant effects on the environment and require an EIA. For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.</p>	<p>Annex III.</p> <ul style="list-style-type: none"> The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor. Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made. 	<p>regulatory framework for environmental protection and management.</p>
<p>Habitats Directive (92/43/EEC)</p>	<ul style="list-style-type: none"> Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora. Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora. Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of community interest. Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. 	<ul style="list-style-type: none"> Propose and protect sites of importance to habitats, plant and animal species. Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. Carry out comprehensive assessment of habitat types and species present. Establish a system of strict protection for the animal species and plant species listed in Annex IV. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Birds Directive (2009/147/EC)</p>	<ul style="list-style-type: none"> Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats. Protect, manage and control these species and comply with regulations relating to their exploitation. The species included in Annex I shall be the 	<ul style="list-style-type: none"> Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas). 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.	<ul style="list-style-type: none"> • Ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes. • Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance. 	regulatory framework for environmental protection and management.
EU Bathing Water Directive (revised) 2006 [2006/7/EC]	The purpose of this Directive is to preserve, protect and improve the quality of the environment and to protect human health by complementing Directive 2000/60/EC	<p>This Directive lays down provisions for:</p> <ul style="list-style-type: none"> • the monitoring and classification of bathing water quality; • the management of bathing water quality; and • the provision of information to the public on bathing water quality 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	Reducing water pollution caused or induced by nitrates from agricultural sources and - preventing further such pollution.	<p>Ireland’s Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland’s third NAP came into operation in 2014. Each Member State’s NAP must include:</p> <ul style="list-style-type: none"> • a limit on the amount of livestock manure applied to the land each year • set periods when land spreading is prohibited due to risk • set capacity levels for the storage of livestock manure 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Directive 2010/75/EU on industrial	The purpose of this Directive is lay down rules to prevent or, where that is not practicable, to reduce industrial emissions into air, water and	<p>The legislation covers industrial activities in the following sectors:</p> <ul style="list-style-type: none"> • energy; 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
emissions	land and to prevent the generation of waste, in order to achieve a high level of environmental protection.	<ul style="list-style-type: none"> • metal production and processing; • minerals; • chemicals; • waste management; • and other sectors such as pulp and paper production, slaughterhouses and the intensive rearing of poultry and pigs. <p>All installations covered by the directive must prevent and reduce pollution by applying the best available techniques (BATs)* and address efficient energy use, waste prevention and management and measures to prevent accidents and limit their consequences.</p>	and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Plant Protection (products) Directive 2009/127/EC	<ul style="list-style-type: none"> • The Directive aims at reducing the risks and impacts of pesticide use on human health and • the environment by introducing different targets, tools and measures such as Integrated Pest • Management (IPM) or National Action Plans (NAPs). 	<ul style="list-style-type: none"> • The Framework Directive applies to pesticides which are plant protection products. • Regarding pesticide application equipment already in professional use, the Framework Directive introduces requirements for the inspection and maintenance to be carried out on such equipment. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Renewable Energy Directive (EU/2018/2001)	<ul style="list-style-type: none"> • This Directive sets an overall European renewable energy target of 32% by 2030 and includes rules to ensure the uptake of renewables in the transport sector and in heating and cooling. • The directive sets common principles and rules for renewable energy support schemes, sustainability criteria for biomass and the right to produce and consume renewable energy and to establish renewable energy 	<ul style="list-style-type: none"> • The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets. • The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables. • EU countries set out how they plan to meet these targets and the general course of their renewable energy policy in national renewable energy action plans. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>communities.</p> <ul style="list-style-type: none"> It also establishes rules to remove barriers, stimulate investments and drive cost reductions in renewable energy technologies and empowers citizens and businesses to participate in the clean energy transformation. 	<ul style="list-style-type: none"> Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports. 	
<p>Directive 2018/2001 on the promotion of the use of energy from renewable sources (recast)</p>	<p>This Directive establishes a common framework for the promotion of energy from renewable sources. It sets a binding European Union target for the overall share of energy from renewable sources in the Union's gross final consumption of energy in 2030: Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least 32%. Support schemes for energy from renewable sources shall be adopted by Member States.</p> <p>Provisions on joint projects between Member States and between Member States and third countries are laid down too.</p>	<p>The Directive lays down rules on financial support for electricity from renewable sources, on self-consumption of such electricity, on the use of energy from renewable sources in the heating and cooling sector and in the transport sector, on regional cooperation between Member States, and between Member States and third countries, on guarantees of origin, on administrative procedures and on information and training. It also establishes sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels. The latter include fuels produced from waste, from agricultural biomass and from forest biomass.</p> <p>The Commission shall monitor the origin of biofuels, bioliquids and biomass fuels consumed in the European Union and the impact of their production, including the impact as a result of displacement, on land use in the Union and in the main third countries of supply.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Alternative Fuels Infrastructure Directive (2014/94/EU)</p>	<p>This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport.</p>	<p>This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<p>Energy Efficiency Directive (EU) 2023/1791</p>	<p>The new directive introduces a series of measures to help accelerate energy efficiency, including embracing the “energy efficiency first” principle in the energy and non-energy policies.</p>	<ul style="list-style-type: none"> • Establishing an EU legally binding target to reduce the EU’s final energy consumption by 11.7% by 2030 (relative to the 2020 reference scenario). This includes for each Member State the requirement to set its indicative national contribution based on objective criteria reflecting national circumstances. If the national contributions do not add up to the EU target, an ambition gap mechanism is applied by the Commission. • Increasing annual energy savings from 0.8% (at present) to 1.3% (2024-2025), then 1.5% (2026-2027) and 1.9% from 2028 onwards. That’s an average of 1.49% of new annual savings for the period from 2024-2030. • Obliging Member States to prioritise vulnerable customers and social housing within the scope of their energy savings measures. • Introducing an annual energy consumption reduction target of 1.9% for the public sector as a whole. • Extending the annual 3% buildings renovation obligation to all the levels of public administration. • Introducing a different approach, based on energy consumption, for business to have an energy management system or to carry out an energy audit. • Bringing in a new obligation to monitor the energy performance of data centres, with an EU-level database collecting and publishing data. • Promoting local heating & cooling plans in larger municipalities. • Progressively increasing the efficient energy consumption in heat or cold supply, also in district 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<p>EU Seveso Directive (2012/18/EU)</p>	<p>This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.</p>	<p>heating.</p> <ul style="list-style-type: none"> • The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas: • Classification, labelling and packaging of chemicals; • The Union's Civil Protection Mechanism; • The Security Union Agenda including CBRN-E and Protection of critical infrastructure; • Policy on environmental liability and on the protection of the environment through criminal law; • Safety of offshore oil and gas operations. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>EU Maritime Spatial Planning Directive (2014/89/EU)</p>	<p>This Directive establishes a framework for maritime spatial planning aimed at promoting the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources.</p>	<ul style="list-style-type: none"> • Each Member State shall establish and implement maritime spatial planning. • In doing so, Member States shall take into account land-sea interactions. • The resulting plan or plans shall be developed and produced in accordance with the institutional and governance levels determined by Member States. This Directive shall not interfere with Member States' competence to design and determine the format and content of that plan or those plans. • Maritime spatial planning shall aim to contribute to the objectives listed in Article 5 and fulfil the requirements laid down in Articles 6 and 8. • When establishing maritime spatial planning, Member States shall have due regard to the particularities of the marine regions, relevant existing and future activities and uses and their impacts on the environment, as well as to natural resources, and shall also take into account land-sea interactions. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> Member States may include or build on existing national policies, regulations or mechanisms that have been or are being established before the entry into force of this Directive, provided they are in conformity with the requirements of this Directive. 	
UK Marine Policy Statement	<ul style="list-style-type: none"> Achieving a sustainable marine economy Ensuring a strong, healthy and just society Living within environmental limits Promoting good governance Using sound science responsibly 	<p>The MPS will facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the high level marine objectives and thereby:</p> <ul style="list-style-type: none"> Promote sustainable economic development; Enable the UK's move towards a low-carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects; Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and heritage assets; and Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Marine and Coastal Access Act 2009	<ul style="list-style-type: none"> Aims to provide the legal mechanism to help ensure clean, healthy, safe, productive and biologically diverse oceans and seas by putting in place a new system for improved management and protection of the marine and coastal environment. 	<p>The Marine Act comprises eight key elements:</p> <ul style="list-style-type: none"> Marine Management Organisation (MMO) Strategic Marine Planning System Streamlined Marine Licensing System Marine Nature Conservation Fisheries Management and Marine Enforcement Migratory and Freshwater Fisheries Coastal Access Coastal and Estuarine Management 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Marine (Northern Ireland) Act 2013	<ul style="list-style-type: none"> Aims to provide for marine plans in relation to the Northern Ireland inshore region; to provide for marine conservation zones in that region; to make further provision in relation to marine licensing for certain electricity works in that region; and for connected purposes. <p>This Act may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.</p>	<p>The Marine Act sets out a new framework for Northern Ireland’s seas based on a system of marine planning that will balance conservation, energy and resource needs; improved management for marine nature conservation and the streamlining of marine licensing for some electricity projects. The main provisions of the Act are outlined below:</p> <ul style="list-style-type: none"> Marine Planning Nature Conservation Marine Licensing 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	<p>The EU’s biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030 and contains specific actions and commitments.</p>	<p>The Strategy contains specific commitments and actions to be delivered by 2030, including:</p> <ul style="list-style-type: none"> Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value. An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss. A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision making. Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		ambitious global biodiversity framework under the Convention on Biological Diversity.	
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	<ul style="list-style-type: none"> • Promoting GI in the main EU policy areas. • Supporting EU-level GI projects. • Improving access to finance for GI projects. • Improving information and promoting innovation. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage	<ul style="list-style-type: none"> • links concepts of nature conservation and the preservation of cultural properties; and • recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two. 	<ul style="list-style-type: none"> • sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them; • each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage; • encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN (1992) The Convention on Biological Diversity	An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.	<p>The Convention has three main goals:</p> <ul style="list-style-type: none"> • the conservation of biological diversity (or biodiversity); • the sustainable use of its components; and • the fair and equitable sharing of benefits arising from genetic resources. 	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN (1992) Framework Convention on Climate Change	<p>It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.</p>	<p>The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	<p>The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions.</p> <p>The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol.</p> <p>At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.</p>	<ul style="list-style-type: none"> • The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II). • EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP. • Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
EU 2020 Climate and Energy Package	<ul style="list-style-type: none"> • Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020. • Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels. • Aims to raise the share of EU energy consumption produced from renewable resources to 20%. • Achieve a 20% improvement in the EU's energy efficiency. 	<p>Four pieces of complimentary legislation:</p> <ul style="list-style-type: none"> • Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps. • Member States have agreed national targets for non-EU ETS emissions from countries outside the EU. • Meet the national renewable energy targets of 16% for Ireland by 2020. • Preparing a legal framework for technologies in carbon capture and storage. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EU 2030 Framework for Climate and Energy	<ul style="list-style-type: none"> • A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries. • Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario. 	<ul style="list-style-type: none"> • To meet the targets, the European Commission has proposed the following policies for 2030: • A reformed EU emissions trading scheme (ETS). • New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries. • First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive) Fourth Daughter Directive (2004/107/EC)	<ul style="list-style-type: none"> • The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive). • Sets new air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives. • Accounts for the possibility to discount natural sources of pollution when assessing 	<ul style="list-style-type: none"> • Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole. • Aims to assess the ambient air quality in Member States on the basis of common methods and criteria. • Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental</p>

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	<p>compliance against limit values.</p> <ul style="list-style-type: none"> Allows the possibility for time extensions of three years (PM₁₀) or up to five years (NO₂, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air. 	<p>resulting from national and community measures.</p> <ul style="list-style-type: none"> Ensures that such information on ambient air quality is made available to the public. Aims to maintain air quality where it is good and improving it in other cases. Aims to promote increased cooperation between the Member States in reducing air pollution. 	<p>protection and management.</p>
<p>Noise Directive (2002/49/EC)</p>	<p>The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.</p>	<p>The Directive requires competent authorities in Member States to:</p> <ul style="list-style-type: none"> Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels; Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and Inform and consult the public about noise exposure, its effects, and the measures considered to address noise. <p>The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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Floods Directive (2007/60/EC)	<ul style="list-style-type: none"> • Establishes a framework for the assessment and management of flood risks • Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community 	<ul style="list-style-type: none"> • Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment • Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3. • Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above. • Inform the public and allow the public to participate in planning process. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Water Framework Directive (2000/60/EC)	<ul style="list-style-type: none"> • Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats. • Preserve and prevent the deterioration of water status and where necessary improve and maintain “good status” of water bodies. • Promote sustainable water usage. • The Water Framework Directive repealed the following Directives: <ul style="list-style-type: none"> • The Drinking Water Abstraction Directive • Sampling Drinking Water Directive • Exchange of Information on Quality of Surface Freshwater Directive • Shellfish Directive • Freshwater Fish Directive • Groundwater Directive 	<ul style="list-style-type: none"> • Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive. • Achieve "good status" for all waters. • Manage water bodies based on identifying and establishing river basins districts. • Involve the public and streamline legislation. • Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas. • Establish a programme of monitoring for surface water status, groundwater status and protected areas. • Recover costs for water services. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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	<ul style="list-style-type: none"> • Dangerous Substances Directive 		
Groundwater Directive (2006/118/EC)	<ul style="list-style-type: none"> • Protect, control and conserve groundwater. • Prevent the deterioration of the status of all bodies of groundwater. • Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals. 	<ul style="list-style-type: none"> • Meet minimum groundwater standards listed in Annex 1 of Directive. • Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Drinking Water Directive (2020/2184)	<ul style="list-style-type: none"> • The recast Drinking Water Directive is the EU’s main law on drinking water. It concerns the access to, and the quality of water intended for human consumption to protect human health. • The EU adopted the recast Drinking Water Directive in December 2020 and the Directive entered into force in January 2021. Member States have to transpose the Directive into national law and comply with its provisions by 12 January 2023. The recast Drinking Water Directive will further protect human health thanks to updated water quality standards, tackling pollutants of concern, such as endocrine disruptors and microplastics, and leading to even cleaner water from the tap for all. 	<p>Key features of the revised Directive are:</p> <ul style="list-style-type: none"> • reinforced water quality standards, in line or, in some cases, even more stringent than the World Health Organisation (WHO) recommendations • tackling emerging pollutants, such as endocrine disruptors and PFAs, as well as microplastics • a preventive approach favouring actions to reduce pollution at source by introducing the risk-based approach • measures to ensure better access to water, particularly for vulnerable and marginalised groups • measures to promote tap water, including in public spaces and restaurants, to reduce (plastic) bottle consumption • harmonisation of the quality standards for materials and products in contact with water • measures to reduce water leakages and to increase transparency of the sector 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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Urban Waste Water Treatment Directive (91/271/EEC)	<ul style="list-style-type: none"> This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. The objective of the Directive is to protect the environment from the adverse effects of waste water discharges. 	<ul style="list-style-type: none"> Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment. Annex II requires the designation of areas sensitive to eutrophication which receive water discharges. Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	<p>Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.</p>	<ul style="list-style-type: none"> Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent. Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures. Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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		<ul style="list-style-type: none"> • The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive. • The competent authority shall be entitled to initiate cost recovery proceedings against the operator. • The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met. • The Environmental Liability Directive has been amended through a number of Directives that are not of significant relevance to the SEA for the Guidelines. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing • knowledge and new needs. 	
<p>Marine Strategy Framework Directive (2008/56/EC), as amended</p>	<p>The aim of the European Union's ambitious Marine Strategy Framework Directive is to protect more effectively the marine environment across Europe.</p>	<p>The Directive provides various requirements, including:</p> <ul style="list-style-type: none"> • Completion of an initial assessment of Irish marine waters; • Establishment of establish environmental targets and indicators; • Establishment of a monitoring programme; • Establishment of a programme of measures; and • Implementation of the programme of measures and monitoring programme. <p>Implementation of the Directive is contributed towards by a set of detailed criteria and methodological standards that were revised in 2017 leading to a Commission Decision on “laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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		<p>methods for monitoring and assessment and repealing Decision 2010/477/EU". Annex III "Indicative lists of characteristics, pressures and impacts" of the Directive was amended in 2017.</p>	
<p>European Convention on the Protection of the Archaeological Heritage (Valletta 1992)</p>	<p>The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.</p>	<p>The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage.</p> <p>It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)</p>	<p>The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co- operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.</p>	<ul style="list-style-type: none"> • The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties. • The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co- operation between states and regions. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and</p>	<p>It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.</p>	<ul style="list-style-type: none"> • (I) Document and understand industrial heritage structures, sites, areas and landscapes and their values; • (II) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes; 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the</p>

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Landscapes ('Dublin Principles')		<ul style="list-style-type: none"> • (III) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and • (IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research. 	Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	<ul style="list-style-type: none"> • Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time. • A heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations. 	<ul style="list-style-type: none"> • Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights. • Recognise individual and collective responsibility towards cultural heritage. • Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal. • Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society. • Greater synergy of competencies among all the public, institutional and private actors concerned. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Landscape Convention 2000	The developments in agriculture, forestry, industrial and mineral production techniques, together with the practices followed in town and country planning, transport, networks, tourism and recreation, and at a more general level, changes in the world economy, have in many cases accelerated the transformation of landscapes. The Convention expresses a concern to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic	<ul style="list-style-type: none"> • Promote protection, management and planning of landscapes. • Organise European co-operation on landscape issues. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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	activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.		
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	<p>It identifies three key objectives:</p> <ul style="list-style-type: none"> • to protect, conserve and enhance the Union's natural capital • to turn the Union into a resource-efficient, green, and competitive low-carbon economy • to safeguard the Union's citizens from environment- related pressures and risks to health and wellbeing 	<p>Four so called "enablers" will help Europe deliver on these objectives (goals):</p> <ul style="list-style-type: none"> • Better implementation of legislation. • Better information by improving the knowledge base. • More and wiser investment for environment and climate policy. • Full integration of environmental requirements and considerations into other policies. • Two additional horizontal priority objectives complete the programme: • To make the Union's cities more sustainable. • To help the Union address international environmental and climate challenges more effectively. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	<p>The convention has three main aims:</p> <ul style="list-style-type: none"> • to conserve wild flora and fauna and their natural habitats • to promote cooperation between states • to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species 	<p>The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also:</p> <ul style="list-style-type: none"> • Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control. • Look at implementing the Bern Convention in central Eastern Europe and the Caucasus. • Take account of the potential impact on natural heritage by other policies. • Promote education and information of the public, ensuring the need to conserve species is understood and acted upon. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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		<ul style="list-style-type: none"> • Develop an extensive number of species action plans, codes of conducts, and guidelines, at their own initiative or in co- operation with other organisations. • Created the Emerald Network, an ecological network made up of Areas of Special Conservation Interest. 	
Bali Road Map (2007)	<p>The overall goals of the project are twofold:</p> <ul style="list-style-type: none"> • To increase national capacity to co-ordinate ministerial views, participate in the UNFCCC process, and negotiate positions within the timeframe of the Bali Action Plan; and • To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities. 	<p>The Bali Action Plan is centred on four main building Blocks:</p> <ul style="list-style-type: none"> • mitigation • adaptation • technology • financing 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Cancun Agreements (2010)	<p>Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover:</p> <ul style="list-style-type: none"> • Mitigation • Transparency of actions • Technology • Finance • Adaptation • Forests • Capacity building 	<p>Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Doha Climate Gateway (2012)	<p>Set of decisions taken at the COP 18 meeting in Doha in 2012 which pave the way for a new agreement in Paris in 2015.</p>	<ul style="list-style-type: none"> • The following actions were committed to by governments at this conference: • Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020); • Complete the work under Bali Action Plan and to focus on new completing new targets; 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the</p>

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		<ul style="list-style-type: none"> Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt; Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries. 	achievement of the objectives of the regulatory framework for environmental protection and management.
EU Common Agricultural Policy	<ul style="list-style-type: none"> To improve agricultural productivity, so that consumers have a stable supply of affordable food; and To ensure that EU farmers can make a reasonable living. 	<ul style="list-style-type: none"> Ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future; Climate change and sustainable management of natural resources; Looking after the countryside across the EU and keeping the rural economy alive. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU REACH Regulation (EC 1907/2006)(as amended)	Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.	<p>The aims are achieved by applying REACH, namely:</p> <ul style="list-style-type: none"> Registration, Evaluation, Authorisation; and Restriction of chemicals. <p>REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.</p>	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Stockholm Convention	The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants.	<ul style="list-style-type: none"> Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex A to the Convention. Restrict the production and use, as well as the import and export, of the intentionally produced POPs that 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the

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		<p>are listed in Annex B to the Convention</p> <ul style="list-style-type: none"> • Reduce or eliminate releases from unintentionally produced POPs that are listed in Annex C to the Convention • Ensure that stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner • To target additional POPs • Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance 	<p>regulatory framework for environmental protection and management.</p>
Ramsar Convention	<p>The Convention’s mission is “the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world”.</p>	<p>Under the “three pillars” of the Convention, the Contracting Parties commit to:</p> <ul style="list-style-type: none"> • Work towards the wise use of all their wetlands; • Designate suitable wetlands for the list of Wetlands of International Importance (the “Ramsar List”) and ensure their effective management; • Cooperate internationally on transboundary wetlands, shared wetland systems and shared species. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
OSPAR Convention	<p>The mission of OSPAR is to conserve marine ecosystems and safeguard human health in the North-East Atlantic by preventing and eliminating pollution; by protecting the marine environment from the adverse effects of human activities; and by contributing to the sustainable use of the seas.</p>	<p>OSPAR's work is organised under six strategies:</p> <ul style="list-style-type: none"> • Biodiversity and Ecosystem Strategy • Eutrophication Strategy • Hazardous Substances Strategy • Offshore Industry Strategy • Radioactive Substances Strategy 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<ul style="list-style-type: none"> Strategy for the Joint Assessment and Monitoring Programme <p>These six strategies fit together to underpin the ecosystem approach. For each strategy a programme of work is designed and implemented annually.</p>	protection and management.
European 2020 Strategy for Growth	<p>Europe 2020 sets out a vision of Europe’s social market economy for the 21st century and puts forward three mutually reinforcing priorities:</p> <ul style="list-style-type: none"> Smart growth: developing an economy based on knowledge and innovation; Sustainable growth: promoting a more resource efficient, greener and more competitive economy; Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion. 	<p>In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020:</p> <ol style="list-style-type: none"> 75 % of the population aged 20-64 should be employed; 3% of the EU’s GDP should be invested in R&D; the “20/20/20” climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 20 million less people should be at risk of poverty. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
The European Green Deal (EGD) 2019	<p>The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people’s quality of life, caring for nature and leaving no one behind.</p>	<ul style="list-style-type: none"> It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution. It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition. In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental</p>

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<p>EU (2018) Clean Air Policy Package</p>	<p>Aims to substantially reduce air pollution across the EU.</p>	<p>The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030 and contains legislative proposals to implement stricter standards for emissions and air pollution.</p>	<p>protection and management.</p> <p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Commission’s Communication on the energy transition of the fisheries and aquaculture sector as part of its Fisheries Policy Package</p>	<p>The main objectives of the measures defined in this communication are to promote the use of cleaner energy sources and reduce dependency on fossil fuels in the fisheries and aquaculture sector, in line with one of the ambitions of the European Green Deal to reach climate neutrality in the EU by 2050.</p>	<p>The communication defines various measures to support the sector in accelerating its energy transition, by improving fuel efficiency and switching to renewable, low-carbon power sources. A summary of the measures broadly proposed by the communication is presented below:</p> <ul style="list-style-type: none"> • Creation of an Energy Transition Partnership for EU Fisheries and Aquaculture for the purpose of promoting collaboration and stakeholder engagement • Promotion of new innovative technologies and ways of operating • Improving energy efficiency <p>Moving to renewable and zero or low-carbon energy sources (e.g., use of alternative fuels).</p>	<p>The communication noted the current dependency of the sector on fossil fuel based energy (e.g., marine diesel). It defines a vision for climate-neutral fisheries and aquaculture.</p>

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National Level			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan (2021 - 2030)	<ul style="list-style-type: none"> The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people. 	<p>The National Planning Framework published alongside the National Development Plan yields ten National Strategic Outcomes as follows:</p> <ol style="list-style-type: none"> 1. Compact Growth 2. Enhanced Regional Accessibility 3. Strengthened Rural Economies and Communities 4. Sustainable Mobility 5. A Strong Economy, supported by Enterprise, Innovation and Skills 6. High-Quality International Connectivity 7. Enhanced Amenity and Heritage 8. Transition to a Low-Carbon and Climate-Resilient Society 9. Sustainable Management of Water and other Environmental Resources 10. Access to Quality Childcare, Education and Health Services 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Planning, Land Use and Transport Outlook 2040 [In Preparation]	<p>The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will:</p> <ul style="list-style-type: none"> Quantify in broad terms the appropriate scale of financial investment in land transport over the long term; Consider how fiscal, environmental and technological developments might impact on this investment; and, Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040. 	<p>In preparation.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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Planning and Development Act 2000 (as amended)	<p>The core principle objectives of this Act are to amend the Planning Acts of 2000 – 2022 with specific regard given to supporting economic renewal and sustainable development.</p>	<ul style="list-style-type: none"> • Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas. • There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission. • Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large scale projects. • Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	<ul style="list-style-type: none"> • The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive. 	<ul style="list-style-type: none"> • The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning. • These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning. • Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004). 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.	<ul style="list-style-type: none"> • They provide, among other things, for: the appointment and functions of authorized officers; identification, classification and other procedures relative to the designation of Community sites. • The Regulations have been prepared to address several judgments of the CJEU against Ireland, notably cases C- 418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waste Management Act 1996, as amended	To make provision in relation to the prevention, management and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009 (S.I 296 of 2009)	The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	Actions: <ul style="list-style-type: none"> • Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997). • Require the production of sub-basin management plans with programmes of measures to achieve these objectives. • Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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<p>European Communities Environmental Objectives (Groundwater) Regulations 2016 (S.I. No. 366 of 2016)</p>	<p>To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.</p>	<p>The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values.</p> <ul style="list-style-type: none"> • Part A of Schedule 6 has been amended to include changes to the rules governing the determination of background levels for the purposes of establishing threshold values for groundwater pollutants and indicators of pollution. • Part B of Schedule 6 has been amended to include nitrites and phosphorus (total) / phosphates among the minimum list of pollutants and their indicators which the Environmental Protection Agency (EPA) must consider when establishing threshold values • Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>S.I. No. 113/2022 - European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022</p>	<p>The purpose of the Regulations is to provide a basic set of measures to ensure the protection of waters, including drinking water sources, against pollution caused by nitrogen and phosphorus from agricultural sources, with the primary emphasis on the management of livestock manures and other fertilisers. The set of measures also provide some basic safeguards against possible harmful impacts on water quality arising from agricultural expansion. This basic set of measures has been strengthened over the last two reviews and this new programme provides a further strengthened set of measures to help reduce nitrogen and phosphorus losses from agriculture and</p>	<p>The Regulations include measures such as:</p> <ul style="list-style-type: none"> • Periods when land application of fertilisers is prohibited • Limits on the land application of fertilisers • Storage requirements for livestock manure; and • Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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	contribute to improvements in water quality.		
<p>National legislation transport the Industrial Emissions Directive:</p> <ul style="list-style-type: none"> • Environmental Protection Agency Act 1992, amended by the Protection of the Environment Act 2003; and • Environmental Protection Agency (Integrated Pollution Control) (Licensing) Regulations 2013. • European Union (Environmental Impact Assessment)(Environmental Protection Agency Act 1992)(Amendment) Regulations 2020 • Environmental Protection Agency (Industrial Emissions)(Licensing) (Amendment) Regulations 2020. • European Union (Industrial 	<p>The purpose of this Directive is lay down rules to prevent or, where that is not practicable, to reduce industrial emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of environmental protection. This legislation transposes the provision of the Directive</p>	<p>The legislation covers industrial activities in the following sectors:</p> <ul style="list-style-type: none"> • energy; • metal production and processing; • minerals; • chemicals; • waste management; • and other sectors such as pulp and paper production, slaughterhouses and the intensive rearing of poultry and pigs. <p>All installations covered by the directive must prevent and reduce pollution by applying the best available techniques (BATs)* and address efficient energy use, waste prevention and management and measures to prevent accidents and limit their consequences.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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<p>Emissions) Regulations 2013</p> <ul style="list-style-type: none"> Environmental Protection Agency (Industrial Emissions)(Licensing)Regulations 2013. <p>Environmental Protection Agency (Licensing Fees) Regulations 2013</p>			
<p>Bathing Water Quality Regulations 2008 (S.I. 79 of 2008)</p>	<p>These Regulations provide for transposition of the EU Bathing Water Directive 2006 (Directive 2006/7/EC of 15 February 2006) which aims:</p> <ul style="list-style-type: none"> To improve health protection for bathers To establish a more pro-active approach to management of bathing waters, and To promote increased public involvement and dissemination of information to the public. 	<ul style="list-style-type: none"> The Regulations establish a new classification system for bathing water quality based on four classifications “poor”, “sufficient”, “good” and “excellent” and generally require that a classification of at least “sufficient” be achieved by 2015 for all bathing waters. Local authorities must take appropriate measures with a view to improving waters which are classified as “poor” and increasing the number of bathing waters classified as “good” or “excellent”. A permanent advice against bathing must be issued in a case where a bathing water is classified as “poor” for five consecutive years. Local authorities are required annually to identify bathing waters, establish a monitoring calendar, carry out the specified monitoring, report the results to the EPA, carry out appropriate management measures where necessary and provide information to the public. There must be public participation in the identification of waters and the general implementation of the Regulations. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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		<ul style="list-style-type: none"> The EPA is required by the Regulations to classify bathing waters, generally on the basis of the monitoring results for the four preceding bathing seasons, and to publish an annual report in relation to bathing water quality. Monitoring by local authorities is to commence not later than 2011 with a view to ensuring that a classification is assigned to bathing waters not later than 2015. Private controllers of access lands may be required to contribute towards the costs incurred by a local authority or the EPA. 	
Bathing Water Quality (Amendment) Regulations 2011 (S.I 351 of 2011)	<p>This Regulation defines further the minimum number of bathing water samples required to carry out a bathing water quality assessment.</p>	<p>Further defines the minimum number of bathing water samples required to carry out a bathing water quality assessment.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Climate Action and Low Carbon Development (Amendment) Act 2021	<p>An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.</p>	<p>When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to:</p> <ul style="list-style-type: none"> The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment entered into by the European Union in response or otherwise in relation to that 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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		<p>objective,</p> <ul style="list-style-type: none"> • The policy of the Government on climate change, • Climate justice, • Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and • The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency. 	
<p>Climate Action Plan 2023</p>	<p>The Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.</p>	<p>The Plan lists the actions needed to deliver on our climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated annually, to ensure alignment with Ireland’s legally binding economy-wide carbon budgets and sectoral ceilings</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Ireland’s Second National Implementation Plan for the Sustainable Development Goals (2022 - 2024)</p>	<ul style="list-style-type: none"> • National Implementation Plan 2022 - 2024 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). • The first version of the Plan (2018 – 2020) provided a 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also included a 	<p>The Plan identifies five strategic objectives to guide implementation:</p> <ul style="list-style-type: none"> • To embed the SDG framework into the work of Government Departments to achieve greater Policy Coherence for Sustainable Development; • To integrate the SDGs into Local Authority work to better support the localisation of the SDGs; • Greater partnerships for the Goals; 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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	'SDG Policy Map' indicating the relevant national policies for each of the targets.	<ul style="list-style-type: none"> To further incorporate the principle of Leave No One Behind into Ireland's Agenda 2030 implementation and reporting mechanisms; and Strong reporting mechanisms 	
Clean Air Strategy for Ireland (2023)	The Clean Air Strategy provides the strategic policy framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	<ul style="list-style-type: none"> Through this document Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation. The Strategy should also help tackle climate change. The Strategy considers a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture. In any discussion relating to clean air policy, the issue of people's health is paramount, this is a strong theme of the Strategy. 	Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EirGrid 's Grid25 Strategy and associated Grid25 Implementation Programme 2017 - 2022	<ul style="list-style-type: none"> EirGrid 's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland. "Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way." 	Grid25, EirGrid 's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand, and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for the Future Development of National and Regional Greenways (2018)	<ul style="list-style-type: none"> The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. It also aims to increase the number and 	<ul style="list-style-type: none"> A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure; Greenways of scale and appropriate standard that have significant potential to deliver an increase in 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental

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	<p>geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.</p>	<p>activity tourism</p> <ul style="list-style-type: none"> • to Ireland and are regularly used by overseas visitors, • domestic visitors and locals thereby contributing to a healthier society through increased physical activity; • Greenways that provide a substantially segregated offroad experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; • Greenways that provide opportunities for the development of local businesses and economies, and • Greenways that are developed with all relevant stakeholders in line with an agreed code of practice. 	<p>protection and management.</p>
<p>National Water Resources Plan (2021)</p>	<ul style="list-style-type: none"> • The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment. • The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment. 	<p>The key objectives of the plan are to:</p> <ul style="list-style-type: none"> • Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions • Assess the current and future water demand from homes, businesses, farms, and industry • Consider the impacts of climate change on Ireland’s water resources • Develop a drought plan advising measures to be taken before and during drought events • Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water • Identify, develop and assess options to help meet potential shortfalls in water supplies • Assess the water resources available at a national level including lakes, rivers and groundwater. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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National Strategic Plan for Aquaculture Development 2030	<p>This multi-annual National Strategic Plan Sustainable Aquaculture Development (2022 – 2030) (NSPSA) overlaps with the EU’s new ‘Strategic guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030’, as well as the programming period (2021 to 2027) of the European Maritime Fisheries and Aquaculture Fund (EMFAF). As such, this plan provides the strategic vision and framework for funding under EMFAF, as well as other EU and national initiatives.</p>	<ul style="list-style-type: none"> • Develop ‘Designated Marine Area Plans’ (DMAPs) for aquaculture to ensure that the sector is championed in Ireland’s Marine Spatial Plan to facilitate investment in different forms of sustainable aquaculture. • More vigilant and responsive monitoring if aquatic diseases and food safety risks. • Develop a comprehensive human capacity plan for Irish aquaculture to promote the sector as an attractive career option, develop leadership, management and business capacity in the sector and provide the necessary skills required over the strategy time period. • Provide coordinated messaging on the sustainable, low carbon nature of Irish aquaculture production, supported by independent certification and open dialogue. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Construction 2020, A Strategy for a Renewed Construction Sector	<ul style="list-style-type: none"> • Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. • The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated. 	<p>This Strategy therefore addresses issues including:</p> <ul style="list-style-type: none"> • A strategic approach to the provision of housing, based on real and measured needs, with mechanisms in place to detect and act when things are going wrong; • Continuing improvement of the planning process, striking the right balance between current and future requirements; • The availability of financing for viable and worthwhile projects; • Access to mortgage finance on reasonable and sustainable terms; • Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety; 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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		<ul style="list-style-type: none"> Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector. 	
<p>National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment</p>	<ul style="list-style-type: none"> The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions. Landscape Strategy Vision: “Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning.” 	<p>The objectives of the National Landscape Strategy are to:</p> <ul style="list-style-type: none"> Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Hazardous Waste Management Plan (EPA) 2021 - 2027</p>	<p>This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the</p>	<p>The revised Plan makes 20 recommendations under the following topics:</p> <ul style="list-style-type: none"> Policy and Regulation Prevention Collection and Treatment 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>previous plan was published.</p> <p>Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period:</p> <ul style="list-style-type: none"> • To prevent and reduce the generation of hazardous waste by industry and society generally; • To maximise the collection of hazardous waste with a • view to reducing the environmental and health impacts of any unregulated waste; • To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export; • To minimise the environmental, health, social and economic impacts of hazardous waste generation and management. 	<ul style="list-style-type: none"> • Implementation 	<p>regulatory framework for environmental protection and management.</p>
<p>National Ports Policy 2013</p>	<p>The core objective of National Ports Policy is to facilitate a competitive and effective market for maritime transport services.</p>	<p>National Ports Policy introduces clear categorisation of the ports sector into Ports of National Significance (Tier 1), Ports of National Significance (Tier 2) and Ports of Regional Significance.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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National Aviation Policy 2015	<p>Specifically, the principal goals of this National Aviation Policy are:</p> <ul style="list-style-type: none"> • To enhance Ireland’s connectivity by ensuring safe, secure and competitive access responsive to the needs of business, tourism and consumers; • To foster the growth of aviation enterprise in Ireland to support job creation and position Ireland as a recognised global leader in aviation; and • To maximise the contribution of the aviation sector to Ireland’s economic growth and development. 	<p>The National Aviation Policy commits to:</p> <ul style="list-style-type: none"> • Maintaining safety as the number one priority in Irish aviation and ensuring that safety regulation is robust, effective and efficient; • Creating conditions to encourage the development of new routes and services, particularly to new and emerging markets; • Ensuring a high level of competition among airlines operating in the Irish market; • Optimising the operation of the Irish airport network to ensure maximum connectivity to the rest of the world; • Ensuring that the regulatory framework for aviation reflects best international practice and that economic regulation facilitates continued investment in aviation infrastructure at Irish airports to support traffic growth; • Supporting the aircraft leasing and aviation finance sectors to maintain Ireland’s leading global position in these spheres; and • Maintaining a safe and innovative general aviation sector to support Ireland’s broader aviation industry 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	<p>The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density.</p>	<p>The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	<p>The vision is: “A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone’s responsibility.”</p>	<p>These four goals are interlinked, interdependent and mutually supportive:</p> <ul style="list-style-type: none"> • Goal 1: Increase the proportion of people who are healthy at all stages of life • Goal 2: Reduce health inequalities • Goal 3: Protect the public from threats to health and wellbeing • Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Marine Planning Framework 2021	<p>The NMPF is a key consideration for decision makers on all marine authorisations. The NMPF creates the overarching framework for decision making that is consistent, evidence based, and secures a sustainable future for the maritime area.</p>	<p>The National Marine Planning Framework is a succinct strategic document that will deal with, inter alia, the following environmental, social and economic issues:</p> <ul style="list-style-type: none"> • Key marine activities such as fisheries, tourism, transport, offshore renewable energy generation, oil and gas exploration and production, aquaculture, and how they interact; • Climate change and related impacts; • Communities and health; • Cultural heritage; • Marine environment and biodiversity; • Transboundary interactions with other jurisdictions. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	<p>The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas and is a sector in which people want to work.</p>	<p>The Tourism Policy Statement sets three headline targets to be achieved by 2025:</p> <ul style="list-style-type: none"> • Overseas tourism revenue of €5 billion per year • net of inflation excluding carrier receipts; • 250,000 people employed in tourism; and • 10 million overseas visitors to Ireland per year. 	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute</p>

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			towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Strategy for Northern Ireland: 10 Year Plan	<ul style="list-style-type: none"> • This Strategy will be published in 2024. • The plan sets out a 10-year plan for the growth of the tourism sector in Northern Ireland., with an aim to increase the value of tourism to the economy by 50-75% compared to 2019. • Vision is to “Establish Northern Ireland as a year-round world class destination which is renowned for its authentic experiences, landscape, heritage and culture and which benefits communities, the economy and the environment, with sustainability at its core.” This Plan may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery. 	<p>The strategic goals and core themes of the Strategy are:</p> <ul style="list-style-type: none"> • Innovative • Inclusive • Sustainable • Attractive • Collaborative <p>The document identifies the key challenges and drivers for growth.</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges.	Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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National Investment Framework for Transport in Ireland (NIFTI) 2021	<ul style="list-style-type: none"> NIFTI is the Department of Transport's framework for prioritising future investment in the land transport network to support the delivery of the National Strategic Outcomes. The NIFTI will guide transport investment in the years ahead to enable the National Planning Framework, support the Climate Action Plan, and promote social, environmental and economic outcomes throughout Ireland. 	<p>The four investment priorities stated in NIFTI are:</p> <ul style="list-style-type: none"> Mobility of people and goods in urban areas. Protection and renewal. Enhanced regional and rural connectivity. Decarbonisation. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans (including transport)	<p>NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur</p>	<ul style="list-style-type: none"> Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance based actions. Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	<p>The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.</p>	<p>2030 will represent a significant milestone, meaning:</p> <ul style="list-style-type: none"> Reduced GHG emissions from the energy sector by between 80% and 95% Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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<p>Wildlife Act of 1976</p> <p>Wildlife (Amendment) Act, 2000</p>	<p>The act provides protection and conservation of wild flora and fauna.</p>	<ul style="list-style-type: none"> • Provides protection for certain species, their habitats and important ecosystems • Give statutory protection to NHAs • Enhances wildlife species and their habitats • Includes more species for protection 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan</p>	<p>Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally.</p>	<ul style="list-style-type: none"> • To mainstream biodiversity in the decision-making process across all sectors. • To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity. • To increase awareness and appreciation of biodiversity and ecosystems services. • To conserve and restore biodiversity and ecosystem services in the wider countryside. • To conserve and restore biodiversity and ecosystem services in the marine environment. • To expand and improve on the management of protected areas and legally protected species. <p>To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Broadband Plan (2012)</p>	<p>Sets out the strategy to deliver high speed broadband throughout Ireland.</p>	<p>The Plan sets out:</p> <ul style="list-style-type: none"> • A clear statement of Government policy on the delivery of High Speed Broadband. • Specific targets for the delivery and rollout of high speed broadband and the speeds to be delivered. • The strategy and interventions that will underpin 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the</p>

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		<p>the successful implementation of these targets.</p> <ul style="list-style-type: none"> • A series of specific complementary measures to promote implementation of Government policy in this area. 	<p>regulatory framework for environmental protection and management.</p>
<p>The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)</p>	<ul style="list-style-type: none"> • Sets out comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. • Ensures flood risk is a key consideration in preparing land use plans and in the assessment of planning applications. • Implementation of the Guidelines is through actions at national, regional, local authority and site-specific levels. • Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts. 	<ul style="list-style-type: none"> • Avoid inappropriate development in areas at risk of flooding. • Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off. • Ensure effective management of residual risks for development permitted in floodplains. • Avoid unnecessary restriction of national, regional or local economic and social growth. • Improve the understanding of flood risk among relevant stakeholders. • Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation • are complied with at all stages of flood risk management. <p>The 2009 Flood Risk Management Guidelines were amended by Circular PL 2/2014 (Department of the Environment, Community and Local Government) that provides advice on the use of OPW flood mapping in assessing planning applications and clarifies some advice from the 2009 Guidelines.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Communities (Water Policy) Regulations of 2003 (SI 722 of</p>	<ul style="list-style-type: none"> • Transpose the Water Framework Directive into legislation. • Outlines the general duty of public authorities in relation to water. • Identifies the competent authorities in 	<ul style="list-style-type: none"> • Implements River basin districts and characterisation of RBDs and River Basin Management Plans. • Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and</p>

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<p>2003)</p> <p>European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)</p> <p>European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)(as amended)</p>	<p>charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions.</p>	<ul style="list-style-type: none"> • Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies. • Allows the competent authority to recover the cost of damage/destruction of status of water body. • Outlines environmental objectives and programme of measures and environmental quality standards for priority substances. • Outlines criteria for assessment of groundwater. • Outlines environmental objectives to be achieved for surface water bodies. • Outlines surface water quality standards. • Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality. 	<p>bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Local Government (Water Pollution) Acts 1977 to 1990</p>	<p>The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.</p>	<p>The Water Pollution Acts enable local authorities to:</p> <ul style="list-style-type: none"> • Prosecute for water pollution offences. • Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters. • Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution. • issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; • Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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<p>Water Services Act 2007</p> <p>Water Services (Amendment) Act 2012</p> <p>Water Services Act (No. 2) 2013</p> <p>Water Services Act 2017</p>	<ul style="list-style-type: none"> • Provides the water services infrastructure. • Outlines the responsibilities involved in delivering and managing water services. • Identifies the authority in charge of provision of water and wastewater supply. • Irish Water was given the responsibility of the provision of water and wastewater services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland. 	<ul style="list-style-type: none"> • Prepare water quality management plans for any waters in or adjoining their functional areas. <p>Key strategic objectives include:</p> <ul style="list-style-type: none"> • Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. • Ensuring the provision of adequate water and sewerage services. • Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards • Ensuring the provision of the remaining infrastructure needed to provide secondary wastewater treatment, for compliance with the requirements of the EU Urban Wastewater Treatment Directive. • Promoting water conservation through Irish Water’s Capital Investment Plan, the Rural Water Programme and other measures. • Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. • Ensuring a fair funding model to deliver water services. • Overseeing the establishment of an economic regulation function under the CER. 	<p>Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Irish Water’s (now known as Uisce Eireann) Water Services Strategic Plan 2015 and associated</p>	<p>This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the</p>	<p>Six strategic objectives as follows:</p> <ul style="list-style-type: none"> • Meet Customer Expectations. • Ensure a Safe and Reliable Water Supply. • Provide Effective Management of Wastewater. • Protect and Enhance the Environment. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the</p>

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Proposed Capital Investment Plan (2020 - 2024)	short and medium term.	<ul style="list-style-type: none"> • Support Social and Economic Growth. • Invest in the Future. 	achievement of the objectives of the regulatory framework for environmental protection and management.
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas 2017 - 2022	Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs	<ul style="list-style-type: none"> • Ensure that the implications of management choices for water levels, quantity and quality are fully explored, understood and factored into policy making and land use planning. • Review the current raised bog NHA network in terms of its contribution to the national conservation objective for raised bog habitats and determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network of NHAs. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Harvest 2020	Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas.	Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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<p>Rural Environmental Protection Scheme (REPS)</p> <p>Agri-Environmental Options Scheme (AEOS)</p> <p>Green, Low-Carbon, Agri-environment Scheme (GLAS)</p>	<ul style="list-style-type: none"> • Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection. • GLAS is the new replacement for REPS and AEOS which are both expiring. 	<ul style="list-style-type: none"> • Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation. • Protect biodiversity, endangered species of flora and fauna and wildlife habitats. • Ensure food is produced with the highest regard to the environment. • Implement nutrient management plans and grassland management plans. • Protect and maintain water bodies, wetlands and cultural heritage. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Rural Development Programme</p>	<p>The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas</p>	<p>At a more detailed level, the programme also:</p> <ul style="list-style-type: none"> • Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; • Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and • Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as • non-agricultural activities 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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Forestry Programme 2023 – 2027	<p>The new Forestry Programme 2023-2027 came into force in 2023, as soon as State Aid approval by the European Commission has been received. The new Programme sets out increased support for a number of schemes.</p>	<p>The proposed Forestry Programme 2023-2027 contains a series of eight different interventions:</p> <ul style="list-style-type: none"> • Forest creation; • Agroforestry; • Infrastructure and technology investments; • Sustainable forest management; • Developing skills and empowering the forest sector for sustainable forest management; • Open forests - social, cultural and heritage forests; • Climate resilient reforestation; • Reconstruction. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
River Basin Management Plan	<p>River Basin Management Plans set out the measures planned to maintain and improve the status of waters.</p>	<ul style="list-style-type: none"> • Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive. • Identify and manages water bodies in the RBD. • Establish a programme of measures for monitoring and improving water quality in the RBD. • Involve the public through consultations. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Peatlands Strategy (2015-2025)	<p>This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.</p>	<p>Objectives of the Strategy:</p> <ul style="list-style-type: none"> • To give direction to Ireland’s approach to peatland management. • To apply to all peatlands, including peat soils. • To ensure that the relevant State authorities and state owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and actions. • To ensure that Ireland’s peatlands are sustainably managed so that their benefits can be enjoyed 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

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		<p>responsible.</p> <ul style="list-style-type: none"> To inform appropriate regulatory systems to facilitate good decision making in support of responsible use. To inform the provision of appropriate incentives, financial supports and disincentives where required. To provide a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs. <p>To ensure that specific actions necessary for the achievement of its objectives are clearly identified and delivered by those involved in or responsible for peatlands management or for decisions affecting their management.</p>	
<p>Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme</p>	<p>The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.</p>	<p>CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Draft National Bioenergy Plan 2014 - 2020</p>	<p>The Draft Bioenergy Plan sets out a vision as follows:</p> <ul style="list-style-type: none"> Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner. 	<p>Three high level goals of equal importance, based on the concept of sustainable development are identified:</p> <ul style="list-style-type: none"> To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs. To increase awareness of the value, opportunities and societal benefits of developing bioenergy. To ensure that bioenergy developments do not 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		adversely impact the environment and its living and non-living resources.	
Draft Renewable Electricity Policy and Development Framework (DCCA) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2018/2001: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017- 2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: <ul style="list-style-type: none"> • AFV forecasts • Electricity targets • Natural gas (CNG, LNG) targets • Hydrogen targets • Biofuels targets • LPG targets • Synthetic and paraffinic fuels targets 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including: <ul style="list-style-type: none"> • 85% increase in exports to €19 billion. • 70% increase in value added to €13 billion. • 60% increase in primary production to €10 billion. • The creation of 23,000 additional jobs all along the supply chain from producer level to high end value added product development. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Strategic Planning Policy Statement (SPPS) NI	<p>The SPPS consolidates some twenty separate policy publications into one document and sets out strategic subject planning policy for a wide range of planning matters. It also provides the core planning principles to underpin delivery of the two-tier planning system with the aim of furthering sustainable development.</p>	<p>The overall objective of the planning system is to further sustainable development and improve well-being for the people of the North.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Policy Framework For Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	<ul style="list-style-type: none"> • This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable. • By 2030 it is envisaged that the movement in Ireland to electrically fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors. 	<p>This policy set out to achieve five key goals in transport:</p> <ul style="list-style-type: none"> • Reduce overall travel demand • Maximise the efficiency of the transport network • Reduce reliance on fossil fuels • Reduce transport emissions • Improve accessibility to transport <p>These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Coastal Change Management Strategy	<p>The Government has adopted a policy to assess and manage coastal flood risk with regard to both existing risk and the potential impacts of climate change.</p> <p>This strategy will:</p> <ul style="list-style-type: none"> • Provide a framework to determine the key decisions to be taken on how Ireland could best manage its coast, being aware of the future risks and the associated planning requirements. 	<p>Recommendations:</p> <ul style="list-style-type: none"> • Enhancing governance and capacity building (a dual approach of both mitigation and adaptation measures) • Understanding the risk and identifying potential risk management options <p>Developing management (a dual approach of both mitigation (tackling the cause) and adaptation measures) to coastal change</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<ul style="list-style-type: none"> Provide a framework to best inform both where and how decisions regarding appropriate development / projects along the coast should be taken in the future, in coordination with investment in flood risk management. 		
Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage (2019)	<ul style="list-style-type: none"> Heritage in Ireland ranges from private homes, commercial and public buildings, national monuments, underwater and buried archaeology and the physical and cultural settings of all of these. This plan considers not only those structures and sites that have been statutorily listed, but all man-made assets that have historical, aesthetic and cultural value, but does not consider natural heritage. <p>Aims to:</p> <ul style="list-style-type: none"> Build adaptive capacity within the sector Reduce the vulnerability of built and archaeological heritage to climate change Identify and capitalise on the various potential opportunities for the sector 	<p>The five adaptation goals for built and archaeological heritage in Ireland are:</p> <ol style="list-style-type: none"> To improve understanding of each heritage resource and its vulnerability to climate change To develop and mainstream sustainable policies and plans for climate-change adaptation of built and archaeological heritage To conserve Ireland’s heritage for future generations To communicate and transfer knowledge <p>To exploit the opportunities for built and archaeological heritage to demonstrate value and secure resources</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.</p>
Heritage related legislation: <ul style="list-style-type: none"> National Monuments Act 1930 as amended; Architectural Heritage (National Inventory) and 	<ul style="list-style-type: none"> Irish Heritage regulations that are relevant to the LACAPs. Broadly, this legislation is designed to conserve and enhance heritage. 	<p>Irish Heritage regulations that are relevant to the LACAPs. Broadly, this legislation is designed to conserve and enhance heritage.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
<p>Historic Monuments (Miscellaneous Provisions) Act 1999; and</p> <ul style="list-style-type: none"> The Heritage Act 2018. 			
All-Island Strategic Rail Review	<p>The Review aims to inform policy and future strategy for the railways in both jurisdictions on the island of Ireland.</p>	<p>The Review sets out six high-level goals which aim to use rail as effectively as possible to:</p> <ul style="list-style-type: none"> contribute to decarbonisation; improve All Island connectivity between major cities; enhance regional accessibility; stimulate economic activity; encourage sustainable mobility; and <p>achieve economic and financial feasibility.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.</p>
Regional/ County/Local Level			
Regional Economic and Spatial Strategies	<p>The Regional Spatial and Economic Strategies provide a long-term regional level strategic planning and economic framework in support of the implementation of the National Planning Framework.</p>	<p>The Eastern and Midland Regional Economic and Spatial Strategy includes provisions for its 12 constituent local authorities: Fingal County Council; Dublin City Council; South Dublin County Council; Dún Laoghaire-Rathdown County Council; Louth County Council; Kildare County Council; Meath County Council; Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council.</p> <p>The Southern Regional Economic and Spatial Strategy includes provisions for its nine constituent local authorities: Waterford City and County Council, Cork City Council, Cork County Council, Tipperary County Council, Wexford County Council, Kerry County Council, Clare County Council, Limerick City and County Council,</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<p>Kilkenny County Council and Carlow County Council.</p> <p>The Northern and Western Regional Spatial and Economic Strategy includes provisions for its eight constituent local authorities: Donegal County Council, Leitrim County Council, Sligo County Council, Cavan County Council, Monaghan County Council, Mayo County Council, Roscommon County Council, and Galway County Council.</p>	
<p>Regional Development Strategy 2035 (Northern Ireland)</p>	<ul style="list-style-type: none"> • Spatial strategy for the future development of Northern Ireland. • Strategic planning framework to facilitate and guide public and private sectors. <p>This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.</p>	<p>Aims to provide long-term policy direction with a strategic spatial perspective.</p>	<p>Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Greater Dublin Area (GDA) Transport Strategy (2022-2042)</p>	<p>It sets out how transport will be developed across the region, covering Dublin, Meath, Wicklow and Kildare, over the period of the strategy and has been approved by the Minister for Transport, Tourism and Sport in accordance with the relevant legislation.</p> <p>This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.</p>	<p>They set out a number of core principles deriving from the strategic vision, which are:</p> <ul style="list-style-type: none"> • Dublin as the capital city of Ireland and a major European centre shall grow and progress, competing with other cities in the EU, and serving a wide range of international, national, regional and local needs. • The Dublin and Mid-East Regions will be attractive, vibrant locations for industry, commerce, recreation and tourism and will be a major focus for economic growth within the Country. • The GDA, through its ports and airport connections will continue to be the most important entry/exit point for the country as a whole, and as a Gateway between the European Union and the rest of the 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<p>World. Access to and through the GDA will continue to be a matter of national importance.</p> <ul style="list-style-type: none"> • Development in the GDA shall be directly related to investment in integrated high quality public transport services and focused on compact urban form. • Development within the existing urban footprint of the Metropolitan Area will be consolidated to achieve a more compact urban form. • Development in the Hinterland Area will be focused on the high quality integrated growth and consolidation of development in key identified towns, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses. 	
<p>Transport Strategy for the Cork Metropolitan Area 2040</p>	<p>The Strategy addresses all transport modes, and its objective will be to provide a long-term strategic planning framework for the integrated development of transport infrastructure and services in the Cork Metropolitan Area, over the next two decades.</p> <p>This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.</p>	<p>It will be used to inform transport investment levels and investment prioritisation over both the longer and shorter terms and will be able to inform sustainable integrated land use and transport policy formulation at the strategic (Metropolitan Area) level and at the local level.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Greater Dublin Area Cycle Network Plan</p>	<ul style="list-style-type: none"> • Sets out a ten year cycling strategy for Counties Dublin, Kildare, Meath and Wicklow • Plan to increase regions cycle network dramatically • The Plan refers to the EuroVelo International Cycle Route Network of the European Cyclists Federation is a network of 15 long distance cycle routes connecting and uniting 	<p>Aims to identify and determine:</p> <ul style="list-style-type: none"> • The Urban Cycle Network at the Primary, Secondary and Feeder level • The Inter-Urban Cycle Network linking the relevant sections of the Urban Network including the elements of the National Cycle Network within the Greater Dublin Area including linkages to key transport locations outside of urban areas such as airports and 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	<p>the whole European continent. Two of these routes are in Ireland</p> <ul style="list-style-type: none"> including EV2 from Galway through Dublin to London, Berlin, Warsaw and Moscow. <p>This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.</p>	<p>ports</p> <ul style="list-style-type: none"> The Green Route Network being cycle routes for development of tourist, recreational and leisure purposes. 	
<p>Dublin to Galway Greenway Plan</p>	<ul style="list-style-type: none"> Develop a segregated cycling and walking trail to international standards, extending from Dublin City to Galway which is of a scale that will allow Ireland to harness the potential of an identified growing tourism market for cycling. This route forms part of an interconnected National Cycle Network of high quality, traffic free, inter urban routes, which will establish Ireland as a quality international tourism destination for a broad range of associated recreational activities and pursuits. <p>This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.</p>	<p>To provide a segregated, substantially off road cycle route from Dublin City to Clifden via Galway City, maximising the use of – where feasible – existing and approved routes and disused railway line corridors and to also use existing plans and/or permitted projects where these have been subject to a consent process that has previously included the carrying out or screening for SEA, EIA and AA.</p>	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Local Transport Plans and Strategies</p>	<ul style="list-style-type: none"> Local Transport Plans and Strategies relevant to a particular local authority functional area provide a more granular framework for the delivery of sustainable transport systems in accordance with higher-level plans. 	<ul style="list-style-type: none"> To promote sustainable transport. To promote integrated and proper transport planning. To promote safe travel. To promote active travel infrastructural development. 	<p>Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental</p>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		To encourage modal shift.	protection and management.
Water Quality Management Plans	<ul style="list-style-type: none"> • Ensure that the quality of waters covered by the plan is maintained. • Maintain and improve the quantity and quality of water included in the Plan scope. 	<ul style="list-style-type: none"> • Monitoring of water bodies against quality standards. • Outlines management programmes for water catchments. • Purpose is to maintain and improve the quantity and quality of groundwater. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Port Masterplans (such as Dublin Port Masterplan 2040 and 2017 Review)	<ul style="list-style-type: none"> • The Masterplan sets out a vision for the operations of the port and land utilisation. • The Masterplan is a non-statutory plan which has nonetheless been framed within the context of EU, national, regional and local development plan policies. 	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	<p>Management planning for nature conservation sites has a number of aims. These include:</p> <ul style="list-style-type: none"> • To identify and evaluate the features of interest for a site • To set clear objectives for the conservation of the features of interest • To describe the site and its management • To identify issues (both positive and negative) that might influence the site • To set out appropriate strategies/management actions to achieve the objectives. 	<ul style="list-style-type: none"> • Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected. • These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater	A Groundwater Protection Scheme provides	A Groundwater Protection Scheme aims to maintain the	Implementation of the Climate Action

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Protection Schemes	guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Economic and Community Plans (LECP)	The overarching vision for each LECP is: “to promote the well-being and quality of life of citizens and communities”	The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Development Plans, Local Area Plans, Planning Schemes	<ul style="list-style-type: none"> • Outlines planning objectives for land use development (including transport objectives). • Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies. • Sets out the policies and proposals to guide development in the specific Local Authority area. 	<ul style="list-style-type: none"> • Identifies future infrastructure, development and zoning required. • Protects and enhances amenities and environment. • Guides planning authority in assessing proposals. • Aims to guide development in the area and the amount of nature of the planned development. • Aims to promote sustainable development. • Provide for economic development and protect natural environmental, heritage. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Green Infrastructure Plans/Strategies	<ul style="list-style-type: none"> • Promotes the maintenance and improvement of green infrastructure in an area. • Aims to protect and enhance biodiversity and habitats. 	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Biodiversity Action Plans	Aims to protect, conserve, enhance and restore biodiversity and ecosystem services across all spectrums.	<ul style="list-style-type: none"> • Outlines the status of biodiversity and identifies species of importance. • Outlines objectives and targets to be met to maintain and improve biodiversity. • Aims to increase awareness. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Heritage Plans	Aims to highlight the importance of heritage at a strategic level.	<ul style="list-style-type: none"> • Manage and promote heritage as well as increased awareness. • Aim to conserve and protect heritage. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
County Landscape Character Assessments	Characterises the geographical dimension of the landscape.	<ul style="list-style-type: none"> • Identifies the quality, value, sensitivity and capacity of the landscape area. • Guides strategies and guidelines for the future development of the landscape. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Freshwater Pearl Mussel Sub- Basin	<ul style="list-style-type: none"> • Identifies the current status of the species and the reason for loss or decline. 	<ul style="list-style-type: none"> • Identifies pressures on Freshwater Pearl Mussels for each of the designated populations in Ireland. 	Implementation of the Climate Action Plan needs to comply with all

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Management Plans	<ul style="list-style-type: none"> Identifies measure required to improve or restore current status. 	<ul style="list-style-type: none"> Outlines restoration measures required to ensure favourable conservation status. 	environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Catchment Flood Risk Management Plans	<ul style="list-style-type: none"> Produced by Local Authorities. Outlines areas local flood risk. Sets out measures to manage and prevent flood risk at a local level. 	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Shellfish Pollution Reduction Programmes	Aims to improve water quality and ensure the protection or improvement of designated shellfish waters in order to support shellfish life and growth and contribute to the high quality of shellfish products directly edible by man.	<ul style="list-style-type: none"> Identifies key and secondary pressures on water quality in designated shellfish areas. Outlines specific measures to address identified key and secondary pressures on water quality. Addresses the specific pressures acting on water quality in each area. 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional Waste Management Plans	These plans (for the Connacht-Ulster, Southern, and Eastern-Midlands regions) give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

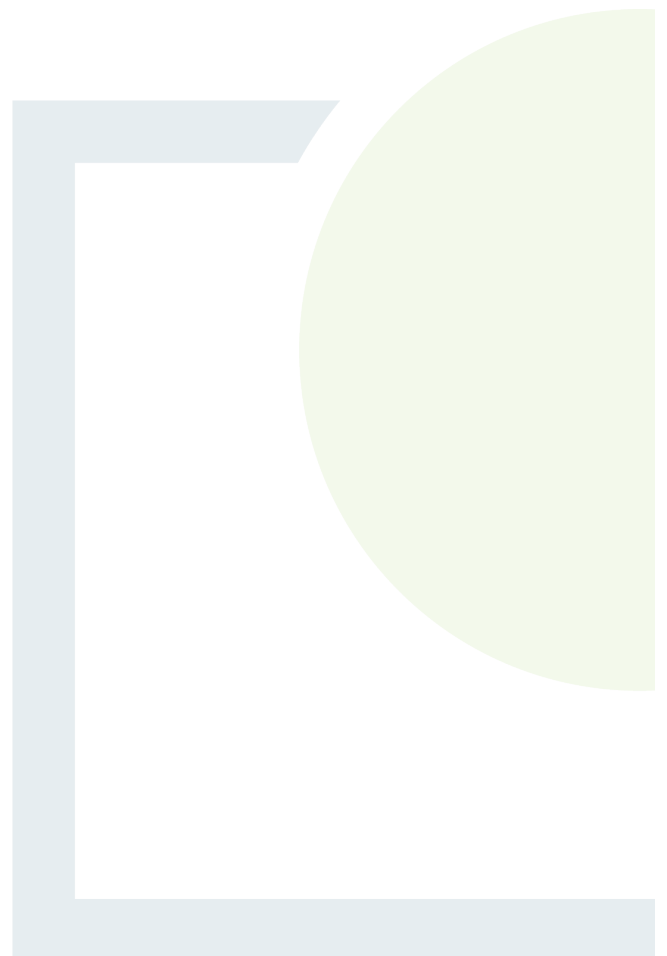
Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Action Plans	The Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to meeting the requirements of the Directive in Ireland.	<p>The main purpose of the Noise Action Plan is to:</p> <ul style="list-style-type: none"> • Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems • Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects • Reduce noise, where possible, and maintain the environmental acoustic quality where it is good 	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 2

Scoping Consultation
Feedback





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Ms Gráinne Kennedy
Climate Action Coordinator
Waterford City and County Council

5th September 2023

Our Ref: SCP230902.1

Re. SEA Scoping for the Waterford Local Authority Climate Action Plan 2024-2029

Dear Ms Kennedy,

We acknowledge your notice, dated 1st September 2023, in relation to the Waterford Local Authority Climate Action Plan 2024-2029 ('the Plan').

The EPA is one of the 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.

Where we provide specific comments on plans and programmes, our comments will focus on the EPA's remit and areas of expertise (in particular water, air, climate change, waste, resource efficiency, noise, radon and the inter-relationships between these and other relevant topics e.g. biodiversity), as appropriate and relevant to the particular plan or programme.

This submission highlights a number of key environmental issues to consider in preparing the Plan and SEA. Some key comments and recommendations are provided below. Appendix I includes comments on the SEA Scoping report, Appendix II includes a list of



high-level plans and programmes to consider, as appropriate and relevant, and Appendix III provides links to various environmental resources that may be useful to you.

EPA Comments and Recommendations

The scale of the challenge facing Ireland to address climate change is significant, as highlighted in our State of Environment Report *'Ireland's Environment - An Integrated Assessment 2020'*¹ (EPA, 2020). We urgently need to accelerate action to reduce our greenhouse gas emissions and implement adaptation measures to increase our resilience to climate change.

We welcome that the Plan will set out a framework of climate actions to be carried out by Waterford County Council, in collaboration with other key stakeholders, over the five-year period from 2024 to 2029. This includes establishing climate action related strategic goals, high level objectives to support the delivery of these goals and also actions that are time-bound, measurable and focused on local level climate action.

We acknowledge that draft strategic goals look to address energy, the built environment and related infrastructure, transportation, natural environment and green infrastructure, Economic development and green enterprise/business, community resilience and just transition, and Governance related aspects. We also acknowledge that the Plan will take account of both climate mitigation and climate adaptation actions.

We recognise the importance of ensuring that the National Transition Objective is underpinned by a clean, healthy and well-protected environment. It is important, in developing and implementing the Plan, that it is set within the context of a wider and more integrated approach to environmental protection.

We note that the Plan will progress the climate adaptation and mitigation required at a local level and will support

- a clear pathway to implement national climate policy locally, and prioritise action on evidence-focused climate measures that need to be taken
- Help deliver the climate neutrality objective at both a local and community level
- Identify and implement a 'Decarbonising Zone' to assist trialling a range of climate mitigation, adaptation and biodiversity measures through identifying projects to help deliver on the National Climate Objective.

The SEA should play a key role in ensuring that this is achieved and should inform decision-making around the assessment and selection of actions and measures. The SEA should also assist in identifying ways to maximise the potential co-benefits of climate-related measures for air quality, human health, biodiversity, water quality and other interrelated areas (i.e. win-win solutions). A key role of SEA is in assessing and informing the selection and refinement of actions and measures that maximise the co-benefits of

¹<https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/state-of-environment-report/>



climate actions for the wider environment and society. This should be highlighted in the SEA Report and the Plan.

You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation, (such as the latest National Climate Action Plan) as well as any relevant sectoral or regional adaptation plans and adjacent local authority climate action plans. The Plan should include a commitment to consider any relevant updated actions, measures or recommendations that may arise in updates to the National Climate Action Plan over the lifetime of the Plan. In this regard, the Climate Action Plan 2024 is currently being prepared and should be taken into account, in preparing and implementing the Plan and SEA.

The Plan and SEA should take into account the recent Climate Council Annual Review report, which is available at:

<https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR-2023-FINAL%20Compressed%20web.pdf>

Additionally, the relevant objectives and policy commitments of the National Planning Framework and the Southern Regional Spatial and Economic Strategy and the County Development Plan should be aligned with and considered, as appropriate.

Greenhouse Gas Emissions

In preparing the Plan and SEA, the direct and indirect impacts of the Plan on greenhouse gas emissions and removals should be assessed. The Agency's most recent projections reports [Ireland's Greenhouse Gas Emissions Projections 2022-2040](#) (EPA, 2023) and [Ireland's Provisional Greenhouse Gas Emissions 1990-2022](#) (EPA, 2023) should be taken into account.

The Climate Action Plan identifies actions to decarbonise electricity generation, the built environment and transport and to move towards carbon neutrality for agriculture, forest and land use sectors. The Plan should also integrate and align with the relevant actions in the Climate Action Plan, as appropriate.

Climate Adaptation

In preparing the Plan and SEA, you should consider how the impacts of climate change, individually and in combination, are likely to influence the implementation of the Plan. The Plan should look to improve resilience of existing and planned critical infrastructure, systems and procedures to the effects and variability of climate change. Vulnerable populations should be considered in the context of just transition/adaptation. The cascading effects of proposed adaptation measures should also be considered. Recent extreme weather events could be useful to assist in identifying areas where for further work is needed to improve resilience, e.g. the resilience of critical water service infrastructure to flooding and drought.

The Plan should include appropriate adaptation measures that can be implemented either directly or through relevant land use plans and/or specific plans e.g. Flood Risk



Management Plans, River Basin Management Plans etc. The Plan will also help inform local authority land use and transport planning.

Additional aspects to consider may include changes in native species and habitats and the spread of invasive species, pests and pathogens. In this regard, the Plant Atlas 2020 project looking at Ireland's changing flora might be useful to consider. A summary of this results can be found at: https://bsbi.org/wp-content/uploads/dlm_uploads/2023/02/BSBI-Plant-Atlas-2020-summary-report-Ireland-WEB.pdf

Water Quality

The Plan should take into account the most recent Water Framework Directive water quality status and risk information, available on the EDEN WFD app. Relevant future projections of river flow are available in either EPA research reports (such as HydroPredict, pending), or academic papers related to these projects.

Air quality

The Plan should take into account the Draft [National Clean Air Strategy](#) (DECC). The [Air Quality in Ireland 2021 Report](#) (EPA, 2022) sets out the most recent status in each of the four air quality zones in Ireland and may be useful to consider.

Data on levels of atmospheric pollutants from the EPA's national ambient air quality monitoring network should also be integrated as appropriate. The pollutants of most concern are traffic-related, including Particulate Matter and Nitrogen Dioxide.

Recent EPA Climate change related publications

Some recent climate change publications that may be useful to consider in preparing the SEA and the Plan are shown below:

- [Ireland's Greenhouse Gas Emissions Projections 2022-2040](#) (EPA, 2023)
- [Ireland's Final Greenhouse Gas Emissions 1990-2021](#) (EPA, 2023)
- [Ireland's Provisional Greenhouse Gas Emissions 1990-2022](#) (EPA, 2023)
- [Climate Change's Four Irelands](#) (EPA, 2022)
- [Ireland's Air Pollutant Emissions 2021 \(1990-2030\)](#) (EPA, 2023)

Additionally, further reports/publications are available at: can be consulted at <https://www.epa.ie/publications/monitoring--assessment/climate-change/>.

[Research report 429: Building Coastal and Marine Resilience in Ireland](#) (EPA, 2023) may be useful to consider. It discusses the need for identification and increased awareness of climate change risks to Ireland's coastal communities. It also highlights the importance of building national resilience across socio-ecological and economic systems.

Other climate- related environmental research reports are available at: <https://www.epa.ie/publications/research/climate-change/>

EPA State of the Environment Report

Our State of Environment Report, [Ireland's Environment - An Integrated Assessment 2020](#) (SOER2020) identifies thirteen 'Key Messages for Ireland'. Delivering Ireland's long-term sustainable development and environmental objectives will involve many different stakeholders to address these key actions. The report recognises the need for full implementation of existing environmental legislation and review of governance/coordination on environmental protection across public bodies. Specifically, information provided in the following chapters should be considered, as appropriate and relevant.

- [Chapter 2](#) (Climate) highlights the clear need for systemic change in Ireland to ensure the country will become the climate neutral and climate resilient society it aspires to be. More urgency is needed to deliver actions on climate mitigation and adaptation and to ensure that Ireland meets its international obligations to reduce greenhouse gas (GHG) emissions. Further measures are required to meet national and EU ambitions to keep the global temperature increase to 1.5°C. These measures will contribute to Ireland achieving climate neutrality by 2050.
- [Chapter 11](#) (Transport). The transport sector has a significant impact on the environment, including being responsible for 20 per cent of Ireland's greenhouse gas emissions. A sustainable mobility transformation is required, with the next decade crucial, whereby necessary journeys are made by sustainable modes such as walking, cycling and public transport, followed by using electric vehicles where unavoidable. For this transformation to happen the measures relating to transport in the Climate Action Plan, and other necessary measures, must be fast tracked. Long-term, integrated spatial and transport planning can achieve compact development and move trips to other modes of transport, including cycling and should be supported in the Plan. Shifting to these modes is an essential part of a sustainable and climate-neutral transition for the transport sector.
- [Chapter 12](#) (Energy). Almost 90% of our total energy use is provided by combustion of mostly imported fossil fuels, which is unsustainable, and we need to begin fast tracking measures within the Climate Action Plan and other necessary solutions. This will involve strategic planning to transform this situation by 2050. Transitioning to using clean energy is essential for the protection of human health, our climate and the wider environment and will help support sustainable development of our society and economy.
- Other chapters to consider include [Chapter 6](#) (Nature) and [Chapter 13](#) (Environment and Agriculture).

The EPA are currently preparing the next iteration of the SOER report. This will be published in 2024. We recommend that a commitment is made in the Plan, to take account of any relevant recommendations in the SOER 2024 report, once published, in implementing the Plan over its lifetime.



Environmental Authorities

Under the SEA Regulations, you should consult with:

- Environmental Protection Agency;
- Minister for Housing, Local Government and Heritage;
- Minister for Environment, Climate and Communications;
- Minister for Agriculture, Food and the Marine.

The EPA may provide additional comments upon receipt of the SEA Environmental Report and Draft Plan/Programme/Variation at the next stage of the SEA process.

If you have any queries or need further information in relation to this submission, please contact me directly at c.omahony@epa.ie. I would be grateful if you could send an email confirming receipt of this submission to: sea@epa.ie.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read 'Cian O'Mahony'.

Cian O'Mahony
SEA Section
Office of Radiation Protection and Environmental Monitoring
Environmental Protection Agency

Appendix I – Comments on the Scoping Report

Scope of the SEA

The Plan should clearly set out the scope, remit and implementation related elements of the Plan. These will have implications for the SEA, in terms of guiding the level of assessment applicable at the appropriate level for the Plan. Where it is envisaged that measures proposed in the Plan will be implemented via other plans, which themselves have been or will be subject to SEA, this should be explained in the Environmental Report and taken into account in the assessment.

Where specific measures will be implemented directly, further detail should be provided in the Environmental Report and Plan on the relevant environmental assessments to be carried out at the project stage and relevant mitigation measures to be applied, as appropriate. There may be merit in exploring this issue further with the relevant environmental authorities during the Plan preparation and SEA processes. Some additional aspects to consider are shown below:

Air and Water Quality

Air quality and water quality considerations should also be included in the list of aspects to be considered in relation to population and human health.

Issues around equity and how vulnerable groups can be best assisted in dealing with and adapting to climate change should be considered, as relevant to the Plan.

In *Table 4.1 – Draft Strategic Environmental Objectives*, the Strategic Environmental Objective (SEO) W3 for Water could be improved by including a commitment to take account of the programme of measures in the River Basin Management Plan, as relevant and appropriate. For Climate Change objectives, consider reference to improving the resilience of the County to the effects of climate change. Also consider including an objective to contribute to minimising greenhouse gas emissions within the County.

Tourism and Recreation objective should also look to support efforts at encouraging supporting efforts to improve the vulnerability of tourism and recreation from the effects of climate change. Promoting circular economy considerations to the tourism sector will also help reduce resource and energy use, active and public transport travel tourism transport options will also contribute to climate mitigation from transport related travel.

Water Resources

With regards flooding, the Plan should consider the need for appropriate zoning and development of lands to avoid incompatible land uses in areas at risk of significant flooding.

Soils / Geology

The protection of high nature value farming areas, and key agricultural lands should be considered.

Where natural resources are required to support development, these should be carried out as efficiently as possible.

Landscape

The key issues for the SEA to consider could also include the potential 'visual impact' of any proposed measures with potential to impact on sensitive landscape areas.

Material Assets

Transportation: The Plan should align with the transport commitments in the National Planning Framework and the Southern Regional Spatial and Economic Strategy, where appropriate and relevant.

Water Supply: Uisce Eireann's National Water Resources Adaptation Framework (and any relevant Regional Water Resource Plans) takes account of potential climate change implications for drinking water supply/service provision and may be also useful to consider.

Cross-cutting issues

Climate change will affect all aspects of our economy and society, with many issues impacting on the operations of individual local authorities. In implementing the Plan and in responding effectively to climate change, coordination, and collaboration among stakeholders on cross-cutting issues is needed.

Integration of SEA and Plan

All recommendations from the SEA and AA processes, including mitigation measures, should be fully integrated in the Plan. We recommend that the Plan includes summary tables outlining the key findings of the SEA and linking the significant environmental effects identified to the proposed mitigation measures, monitoring programme and Plan policies/measures.

Monitoring, Implementation & Reporting

The Plan should include a commitment to implement the environmental monitoring programme and associated reporting set out in the Environmental Report. We suggest including a separate section on '*Monitoring, Implementation and Reporting*' in the Plan, setting out the provisions for monitoring and reporting on the implementation of the Plan and periodic reviews. There may be merits in aligning the periodic reviews of the Plan with existing cyclical reporting e.g. *Ireland's Environment*, National Planning Framework, Water Framework Directive, Marine Strategy Framework Directive etc.

In between review periods for the Plan, we recommend that Plan-related implementation reports are published annually, or biennially, as appropriate. We recommend aligning these Plan implementation monitoring/reporting with the environmental monitoring required under the SEA legislation. Doing so would enable the environmental performance of the Plan to be evaluated and would also provide for increased transparency during implementation.

The SEA-related monitoring should address positive, negative and cumulative effects where they are likely to occur and should include provision for on-going review to facilitate an early response to any significant environmental issues that may arise. The Environmental Report should specify the monitoring frequency and responsibilities and include provisions for reporting on the monitoring. To avoid duplication in data collection, the same indicators should be used for the plan-related and SEA-related monitoring where possible.

Consideration of other key Plans and Programmes

You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation. Actions and measures proposed should be consistent with the *Climate Action and Low Carbon Development (Amendment) Act, 2021* and the Climate Action Plan, as well as considering any relevant sectoral and regional climate adaptation plans.

The Plan will be a key element linking national and international policy commitments with climate action within the local authority area at a community and local level. We also recognise that local authorities will set out in their own local authority climate action plans, their targets to achieve the 50% improvements in energy efficiency, under the Climate Action Plan, as well as the 51% reduction in Greenhouse gas emissions set out in the Climate Action and Low Carbon Development (Amendment) Act 2021.

We recommend including a flow diagram or/ schematic, illustrating where the Plan fits within the hierarchy of land-use, climate and related plans. We also recommend including schematics in the Plan and SEA Environmental Report, showing the links and key inter-relationships with other key relevant national, regional, sectoral and environmental plans/programmes.

Data & Knowledge Gaps

The SEA should identify any significant data and knowledge gaps, including commitments to help address these on a priority basis during the implementation phase of the Plan. This is with a view to strengthening the evidence base for future reviews and iterations of the Plan.

Available Guidance & Resources

Climate : The 'Climate Ireland' website provides information, support and advice to help local authorities, sectors and government departments to adapt to climate change and includes a Local Authority Adaptation Support Wizard. It can be consulted at <http://www.climateireland.ie/#/>

SEA: Our website contains various SEA resources and guidance, including SEA process guidance and checklists, Inventory of spatial datasets relevant to SEA, topic specific SEA guidance (including *Integrating climatic factors into SEA* (EPA, 2019), *Good practice note on Cumulative Effects Assessment* (EPA, 2020), *Guidance on SEA Statements and*



Monitoring (EPA, 2023), *Developing and Assessing Alternatives in SEA* (EPA, 2015), and *Integrated Biodiversity Impact Assessment* (EPA, 2012)).

You can access these guidance notes and other resources at: <https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/sea-topic-and-sector-specific-guidance/>

Environmental Sensitivity Mapping (ESM) Webtool

The ESM Webtool is a decision support tool to assist SEA and planning processes in Ireland. The tool brings together over 100 datasets and allows users to explore environmental considerations within a particular area and create plan-specific environmental sensitivity maps. These maps can help planners anticipate potential land-use conflicts and help identify suitable development locations, while also protecting the environment. The ESM Webtool is available at www.enviromap.ie.

EPA SEA GIS Search and Reporting Webtool

Our SEA GIS Search and Reporting Webtool is publicly available through EPA Maps at <https://gis.epa.ie/EPAMaps/SEA>. It allows public authorities to produce an indicative report on key aspects of the environment in a specific geographic area. It is intended to assist public authorities in SEA screening and scoping exercises.

EPA WFD Application

Our WFD Application provides a single point of access to water quality and catchment data from the national WFD monitoring programme. The Application is available via www.catchments.ie.

EPA AA GeoTool

Our AA GeoTool application has been developed in partnership with the NPWS. It allows users to select a location, specify a search area and gather available information for each European Site within the area. It is also available through EPA <https://gis.epa.ie/EPAMaps/AAGeoTool>.

Appendix II – Suggested high level plans to consider

National	
<i>Planning</i>	<ul style="list-style-type: none"> - National Planning Framework (DHLGH) - Rural Development Programme (DAFM)
<i>Agriculture</i>	<ul style="list-style-type: none"> - CAP Strategic Plan 2023-2027 / FoodVision 2030 / Agri Food Strategy 2030 (DAFM)
<i>Biodiversity</i>	<ul style="list-style-type: none"> - National Biodiversity Action Plan (DHLGH)
<i>Climate</i>	<ul style="list-style-type: none"> - Climate Action Plan 2023 (DECC), 2024 Climate Action Plan under preparation - Sectoral Climate Change Adaptation Strategies and Low Carbon Roadmaps - National Adaptation Framework (DECC) - National Policy Position on Climate Action and Low Carbon Development (DECC) - EU Climate Adaptation Strategy 2021
<i>Energy</i>	<ul style="list-style-type: none"> - National Renewable Electricity Policy Framework (in preparation DECC) - Grid Implementation Strategy (Eirgrid) - Framework for Alternative Fuel Infrastructure in Transport (DoT) - Offshore Renewable Energy Development Plan I and II –in preparation (DECC) - National Bioenergy Plan (DECC)
<i>Forestry</i>	<ul style="list-style-type: none"> - Ireland’s Forest Strategy 2022-2030 (DAFM)
<i>Landscape</i>	<ul style="list-style-type: none"> - National Landscape Strategy (DHLGH)
<i>Tourism</i>	<ul style="list-style-type: none"> - 10 Year Tourism Strategy (Fáilte Ireland)
<i>Transport</i>	<ul style="list-style-type: none"> - Smarter Transport / Strategic Framework for Integrated Land Transport (DoT) - National Greenway Strategy (DoT) - Draft All Island Strategic Rail Review - National Investment Framework for Transport Investment
<i>National Overview</i>	<ul style="list-style-type: none"> - State of the Environment Report 2020 (EPA)
<i>Waste</i>	<ul style="list-style-type: none"> - Waste Action Plan for a Circular Economy (DECC, 2020) - National Hazardous Waste Management Plan 2021-2027 (EPA)
<i>Water</i>	<ul style="list-style-type: none"> - National River Basin Management Plan for Ireland (DHLGH) - Water Services Strategic Plan (Irish Water) - Capital Investment Programme (Irish Water) - Draft Water Resources Management Plan (Irish Water) - National CFRAMS Programme (OPW)
Regional	
<i>Planning</i>	<ul style="list-style-type: none"> - Regional Spatial and Economic Strategies
<i>Energy</i>	<ul style="list-style-type: none"> - County Renewable Energy / Wind Energy Strategies
<i>Tourism</i>	<ul style="list-style-type: none"> - Regional Tourism Strategies - County Tourism Strategies / Visitor Experience Development Plans
<i>Water</i>	<ul style="list-style-type: none"> - Relevant CFRAMS Flood Risk Management Plans

Appendix III – Links to environmental guidance / reports

Air	https://www.epa.ie/publications/monitoring--assessment/air/
Bathing Water	https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/
Biodiversity	http://www.npws.ie/guidance-appropriate-assessment-planning-authorities http://www.npws.ie/publications
Climate Action	https://www.dccae.gov.ie/en-ie/climate-action/Pages/default.aspx https://www.epa.ie/publications/monitoring--assessment/climate-change/ https://www.climateireland.ie/
Cumulative Effects Assessment	https://www.epa.ie/publications/monitoring--assessment/assessment/good-practice-guidance-on-cumulative-effects-assessment-in-sea.php
DHPLG Guidelines / Legislation	https://www.housing.gov.ie/planning/planning
Drinking Water	https://www.epa.ie/publications/monitoring--assessment/drinking-water/
EIA	https://www.housing.gov.ie/planning/planning
Energy Conservation	www.seai.ie
Flood Risk	https://www.flooding.ie/Planning/
Geology / Geomorphology	www.gsi.ie
Ground Water	https://www.epa.ie/our-services/monitoring--assessment/freshwater--marine/groundwater/
Landscape Character Assessment	http://www.heritagecouncil.ie/
SEA EPA resources	https://www.epa.ie/publications/monitoring--assessment/assessment/Updated Draft SEA Guidelines (DHLGH, 2021)
State of Environment	https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/state-of-environment-report/
Surface Water	https://www.epa.ie/our-services/monitoring--assessment/freshwater--marine/#
Transportation	https://www.nationaltransport.ie/planning-policy/ https://www.tii.ie/technical-services/environment/
Waste Management	https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/ https://www.epa.ie/our-services/monitoring--assessment/waste/

In relation to adaptation and the potential effects of climate change on Agriculture, there are a number of measures that can be applied to build resilience, many of which can also have benefits from a mitigation perspective.

Maintaining a fodder reserve on farm can address the effects of longer and wetter winters as well as poorer weather conditions in spring at the start of the grazing season. The Teagasc advisory service and private Agricultural Consultants are available to provide the appropriate advice to farmers. Diversification in agricultural systems will increase resilience of farms to climate change and reduce the economic risk.

Creating further resources to harbour and restore biodiversity improve resilience to climate change. The planting of trees and forestry can contribute to carbon sequestration, and biodiversity by providing a more diverse ecosystem to build resilience. Improvements in soil structure, management and health by increasing soil organic carbon will enhance water holding capacity beneficial for drought conditions as well as high rainfall events. Peatland restoration will also improve water holding capacity as well as water quality.

Changes in climate can encourage an increase in exotic pests and diseases including invasive species - which would have a negative impact on biodiversity if measures to promote resilience are not put in place. Equally, warmer and wetter climatic conditions encourage increased disease pressure in livestock, for instance an increased prevalence of liver fluke.



Waterford City and County Council
The Mall
Waterford

26 September 2023

Re: Waterford City and County Council Climate Action Plan 2024-2029

Your Ref: n/a

Our Ref: 23/258

Dear Sir/Madam,

Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and gather various data for that purpose. Please see our [website](#) for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

The publicly available data referenced/presented here, should in no way be construed as Geological Survey Ireland support for or objection to the proposed development or plan. The data is made freely available to all and can be used as independent scientific data in assessments, plans or policies. It should be noted that in many cases this data is a baseline or starting point for further site specific assessments.

With reference to your email received on the 08 September 2023, concerning the Waterford City and County Council Climate Action Plan 2024-2029, Geological Survey Ireland would encourage use of and reference to our datasets. This data can add to the content and robustness of the SEA process. With this in mind please, find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets.

Geoheritage

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS) in the Department of Culture, Heritage and the Gaeltacht to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme in Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme were rigorously selected by a panel of theme experts.

County Geological Sites (CGSs) have been adopted in the National Heritage Plan, and will form a major strand of geological nature conservation to complement the various ecological and cultural conservation measures. It is important to note however, that management issues for the majority of geological heritage sites may differ from ecological sites. County Geological Sites are the optimal way of addressing the responsibility of each authority under the Planning and Development Act 2000 and its amendments, to protect sites of geological interest.

The audit for Waterford was published in 2012. The full report details and individual CGS Reports can be found [here](#).

Groundwater

Geological Survey Ireland's [Groundwater and Geothermal Unit](#), provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.

Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our [Map viewer](#) which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.



[GWClimate](#) is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the [Map viewer](#).

Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. **The Groundwater Protection Response overview and link to the main reports is here:** <https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx>

Geological Mapping

Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found [here](#), in your future assessments.

Please note we have recently launched QGIS compatible bedrock (100K) and Quaternary geology map data, with instructional manuals and videos. This makes our data more accessible to general public and external stakeholders. QGIS compatible data can be found in our downloadable bedrock 100k .zip file on the [Data & Maps](#) section of our website.

Geotechnical Database Resources

Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our [Geotechnical Map Viewer](#). We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project.

Geohazards

Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.

Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated [Map Viewer](#). Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.

Geological Survey Ireland also engaged in a national project on Groundwater Flooding. The data from this project may be useful in relation to Flood Risk Assessment (FRA) and management plans, and is described in more detail under 'Groundwater' above.

Coastal Vulnerability while seen as a potential geohazard, is discussed in more detail under our marine and coastal unit information below.

Geothermal Energy

Geothermal energy harnesses the heat beneath the surface of the Earth for heating applications and electricity generation, and has proven to be secure, environmentally sustainable and cost effective over long time periods. Geothermal applications can range in depth from a few metres below the surface to several kilometres. Ireland has widespread shallow geothermal resources for small and medium-scale heating applications, which can be explored online through Geological Survey Ireland's Geothermal Suitability maps for both domestic and commercial use. We recommend use of our [Geothermal Suitability maps](#) to determine the most suitable type of ground source heat collector for use with heat pump technologies. Ireland also has recognised potential for deep geothermal resources.



The Roadmap for a Policy and Regulatory Framework for Geothermal Energy was launched at the Geoscience 2020 Conference in November 2020. The [Assessment of Geothermal Resources for District heating in Ireland](#) and the [Roadmap for a Policy and Regulatory framework for Geothermal Energy in Ireland](#) documents have been developed to support the Government's commitments under the Climate Action Plan 2019 and the Programme for Government.

For further information please see our [Geoenergy pages](#) on our website or contact the [Groundwater and Geothermal Unit](#) of the Geological Survey Ireland directly.

Natural Resources (Minerals/Aggregates)

Geological Survey Ireland is of the view that the sustainable development of our natural resources should be an integral part of all development plans from a national to regional to local level to ensure that the materials required for our society are available when required. Geological Survey Ireland highlights the consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process.

Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our [Minerals section](#) of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our [Map Viewer](#).

We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in developments are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.

Geochemistry of soils, surface waters and sediments

Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at <https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx>. This page also hosts Geochemical Mapping of Agricultural and Grazing Land Soil of Europe (GEMAS) and litho-geochemistry (rock geochemistry) from southeast Ireland datasets. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture ([Terra Soil](#)), waste soil characterisation ([Geochemically Appropriate Levels for Soil Recovery Facilities](#)) and mineral exploration ([Mineral Prospectivity Mapping](#)).

Geophysical data

Geological Survey Ireland produces high-resolution geophysical data (Magnetic field, electrical conductivity, natural gamma-ray radiation) of soils & rocks as part of the [Tellus programme](#). These data currently cover approximately 75% of the country and provide supporting geological information on a regional scale useful for assessing environmental impact and risk.

Historic Mines

The EPA, Geological Survey Ireland and the former Exploration & Mining Division undertook a joint project entitled "Historic Mine Site - Inventory and Risk Characterisation (HMS - IRC)". This project carried out detailed site investigations and characterisation on priority historic mine sites in the country.

A risk ranking methodology was developed which categorised the sites according to the risks posed to human and animal health and the environment. The project commenced in January 2006 and was completed in December 2008. A final report and a GIS geodatabase was produced on completion of the project. Reports and maps available [here](#). The project provides an understanding of the impacts of historic mining sites in Ireland and their status at the time of the study.

Marine and Coastal Unit

Our marine environment is hugely important to our bio-economy, transport, tourism and recreational sectors. It is also an important indicator of the health of our planet. Geological Survey Ireland's Marine and Coastal Unit in partnership with the Marine Institute, jointly manages [INFOMAR](#), Ireland's national marine mapping programme; providing key baseline data for Ireland's marine sector.



The programme delivers a wide range of benefits to multi-sectoral end-users across the national blue economy with an emphasis on enabling our stakeholders. Demonstrated applications for the use of INFOMAR's suite of mapping products include Shipping & Navigation, Fisheries Management, Aquaculture, Off-shore Renewable Energies, Marine Leisure & Tourism and Coastal Behaviour.

INFOMAR also produces a wide variety of seabed mapping products that enable public and stakeholders to visualize Ireland's seafloor environment <https://www.infomar.ie/maps/downloadable-maps/maps>. [Story maps](#) have also been developed providing a different perspective of some of the bays and harbors of the Irish coastline. We would therefore recommend use of our Marine and Coastal Unit datasets available on our [website](#) and [Map Viewer](#).

The Marine and Coastal Unit also participate in coastal change projects such as [CHERISH](#) (Climate, Heritage and Environments of Reefs, Islands, and Headlands) and are undertaking mapping in areas such as coastal vulnerability and coastal erosion. Further information on these projects can be found [here](#).

National Coastal Change Assessment

Geological Survey Ireland is undertaking a National Coastal Change Assessment. As part of this initiative two mapping products will be delivered for the entire Irish coastline: **coastal vulnerability mapping and shoreline change**.

Coastal vulnerability maps will provide an insight into the relative susceptibility of the Irish coast to adverse impacts of sea-level rise through the use of a **Coastal Vulnerability Index (CVI)**. Currently the project is being carried out on the east coast and will be rolled out nationally over the next couple of years, detailed information and maps are available [here](#). **Shoreline change rates** for the period 2000 to 2023 are being prioritised and will be released by county on a rolling basis over the next 12 months. Shoreline change rates database and reports will be accessible from [GSI](#) web mapping viewers. These suite of coastal mapping products are aimed at coastal managers to prioritise or concentrate efforts on adaptation.

Physiographic Units

Physiographic Units are cartographic representations of the broad-scale physical landscape of a region. They delineate physical regions showing internal uniformity with respect to one or more environmental attributes that can be clearly differentiated from neighbouring regions. They are valuable for regional land-use planning, and in studies of the influence of physical landscape on the ecological environment. This map is produced in support of the actions to be implemented in National Landscape Strategy for Ireland 2015 – 2025. Physiographic Units map data can be viewed online under the Physiographic Units tab on the online [Map Viewer](#).

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to the Geological Survey Ireland Planning Team at GSIPlanning@gsi.ie.

Yours sincerely,

Geoheritage and Planning Programme

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.

Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes
following European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018
(S.I. No. 296 of 2018)

Geological Survey Ireland Programme	Dataset	Relevant EIA Topic	Coverage	Description / Notes / Limitations	Link to Geological Survey Ireland map viewer
Geohazards	Landslide: National landslide database and landslide susceptibility map	Land & Soil/Climate/Landscape	National	Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=b68cf1e4a9044a5981f950e9b9c5625c
Geohazards	Groundwater Flooding (Historic)	Water	Regional	Provide information of historic flooding, both surface water and groundwater. [A lack of flooding presented in any specific location of the map only indicates that a flood has not been detected. It does not indicate that a flood cannot occur in that location at present or in the future]	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b808652f9c735b1cc
Geohazards	Groundwater Flooding (Predictive)	Water	Regional	Provides information on the probability of future karst groundwater flooding (where available). [The maps do not, and are not intended to, constitute advice. Professional or specialist advice should be sought before taking, or refraining from, any action on the basis of the flood maps]	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b808652f9c735b1cc
Geohazards	Radon Map	Land & Soils/Air	National		http://www.epa.ie/radiation/radonmap/
Geoheritage	County Geological Sites as adopted by National Heritage Plan and listed in County Development Plans	Land & Soils/Landscape	Regional	All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS.	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0b2fbd2aaac3c228
Geological Mapping	Bedrock geology:	Land & Soils	National	1:100,000 scale and associated memoirs.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7e1b6ab8d58&scale=0
Geological Mapping	Bedrock geology:	Land & Soils	Regional	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7e1b6ab8d58&scale=0
Geological Mapping	Quaternary geology: Sediments	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7e1b6ab8d58&scale=0
Geological Mapping	Quaternary geology: Geomorphology	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7e1b6ab8d58&scale=0
Geological Mapping	Physiographic units:	Land & Soils	National	Broad-scale physical landscape units mapped at 1:100,000 scale in order to be represented as a cartographic digital map at 1:250,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=afa76a420f54877843aca1bc075c62b
Geological Mapping	GeoUrban: Spatial geological data for the greater Dublin and Cork areas	Land & Soils	Regional	Includes 3D models	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=9768f4818b794c16093beb2212a850ce6&scale=0
Geological Mapping	Geotechnical database	Land & Soils	National	Digitised geotechnical and Site Investigation Reports and boreholes which can be accessed through online downloads	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=a21718be1873d47a585a3f0415b4a724c
Goldmine	Historical data sets including geological memoirs and 6" to 1 mile geological mapping records	Land & Soils/Water	National	available online	https://secure.dcaea.gov.ie/goldmine/index.html
Groundwater & Geothermal	Groundwater resources (aquifers)	Water	National	Data limited to 1:100,000 scale; sites should be investigated at local scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater recharge.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale; long term annual average recharge	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater vulnerability.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Group scheme and public supply source protection areas.	Water	National	Not all PWS / GWS have SPZ / ZOC. Check with IW / coco / NFGWS for private supplies.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater Protection Schemes	Water	National	Data is limited to scale of 1:40,000. Data does not include all of the source protection areas	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Catchment and WFD management units.	Water	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	karst specific data layers	water	National	For areas underlain by limestone, includes karst features, tracer test database; turf/lough water levels (gwlevel.ie)	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Wells and Springs	Water	National	Not comprehensive, there may be unrecorded wells and springs	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater body Descriptions	Water	National	Not exhaustive; only those in designated SACs; could be other GWDTEs; for more information contact NPWS / EPA / site investigations Also, Roadmap for a Policy and Regulatory Framework for Geothermal Energy, November 2020	https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/activities/understanding-ireland-groundwater/Pages/Groundwater-bodies.aspx
Groundwater & Geothermal	Geothermal Suitability maps	Land & Soils/Water	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=9eae46bee08de41278b90a9916d0c0b9e
Marine & Coastal Unit	INFOMAR - Ireland's national marine mapping programme; providing key baseline data for Ireland's	Water	National		https://secure.dcaea.gov.ie/GSI/INFOMAR_VIEWER/
Marine & Coastal Unit	CHERISH - Coastal change project (Climate, Heritage and Environments of Reefs, Islands, and Headlands)	Water	Regional		http://www.cherishproject.eu/en/
Marine & Coastal Unit	Coastal Vulnerability Index (CVI).	water / Land & Soils	Regional	Currently the project is being carried out on the east coast and will be rolled out nationally	https://www.gsi.ie/en-ie/programmes-and-projects/marine-and-coastal-unit/projects/Pages/Coastal-Vulnerability-Index.aspx
Minerals	Aggregate potential	Land & Soils/Material Assets	National	Consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa6f1344416dc9956
Minerals	Active quarries	Land & Soils	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa6f1344416dc9956
Minerals	Historic mines	Land & Soils/Cultural Heritage	National	Inventory and Risk Classification 2009. Environmental Protection Agency, Economic Minerals Division and Geological Survey Ireland (DECC).	https://gis.epa.ie/EPAMaps/default?zesting=7&northing=7&lid=EPA:LEMA_Facilities_Extractive_Facilities https://www.epa.ie/enforcement/mines/
Tellus	Geochemical data: multi-element data for shallow soil, stream sediment and stream water	Land & Soils	Regional	A national mapping programme	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707f72754
Tellus	Airborne geophysical data including radiometrics, electromagnetics and magnetics	Land & Soils	Regional	A national mapping programme	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707f72754
Tellus	urban geochemistry mapping (Dublin SURGE project).	Land & Soils	Regional		https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707f72754

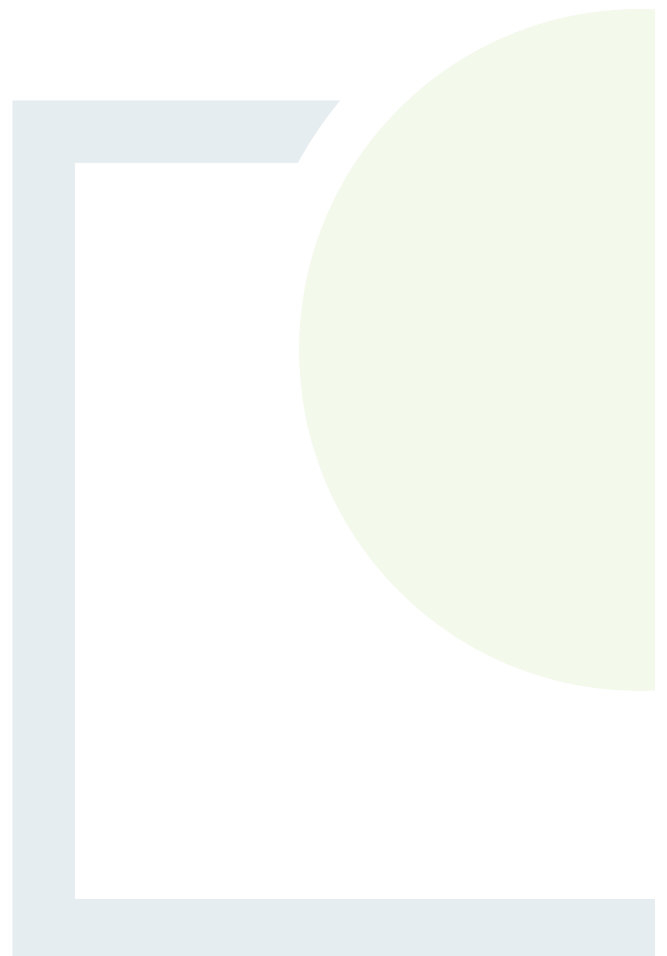
- Notes:
- The maps and data listed above are available on the Geological Survey Ireland map viewer <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>
 - Please read all disclaimers carefully when using Geological Survey Ireland data
 - Geological Survey Ireland and Irish Concrete Federation published guidelines for the treatment of geological heritage in the extractive industry in 2008.



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 3

Detailed Evaluation of the
Environmental Effects of
LACAP Implementation



Appendix 3.1 - Approach and Methodology for the Detailed Evaluation of Environmental Effects of LACAP Implementation

A detailed evaluation of the potential effects of the Preferred LACAP on the baseline environment has been carried out in accordance with best practice guidelines. An evaluation matrix template has been developed to facilitate the evaluation of the Preferred LACAP on Strategic Environmental Objectives (SEOs) relevant to each Environmental Component.

A dedicated evaluation matrix has been prepared for each Goal Area in the LACAP. LACAP Actions associated with that Goal Area are listed on one axis of this matrix. The corresponding potential environmental effects of the actions are then described. An evaluation of the environmental effects of LACAP Actions on Environmental Components, having regard to the SEOs relevant to each Environment Component, was then carried out for each Goal Area of the LACAP in accordance with the requirements of the SEA Directive and best practice guidelines. Potential effects of the LACAP on Environmental Components/SEOs have been categorised as follows:

- Potential Positive Environmental Impact (indicated in the matrix by a '+').⁷²
- Potential Negative Environmental Impact (indicated in the matrix by a '-').⁷³
- Potential Positive and Negative Environmental Impacts (indicated in the matrix by a '+/-').
- Uncertain Environmental Impact ((indicated in the matrix by a '?').
- Neutral, No or Insignificant Environmental Impact (indicated in the matrix by a '0').

The evaluation considers all potential direct, indirect/secondary, cumulative⁷⁴, synergistic⁷⁵, short, medium and long-term, permanent and temporary, positive and negative environmental effects.

Detail on the SEOs associated with Environmental Components which the environmental effects of the LACAP have been measured against is provided in Table 1 overleaf.

Completed Evaluation Matrices for each LACAP Goal Area are presented in Appendix 3.2.

⁷² Potential Positive Environmental Impacts are defined as having the potential to support the achievement of an SEO.

⁷³ Potential Negative Environmental Impacts are defined as having the potential to hinder the achievement of an SEO.

⁷⁴ The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

⁷⁵ The addition of effects to create a total effect greater than the sum of the individual effects so that the nature of the final impact is different to the nature of the individual impact.

Table 1 - Strategic Environmental Objectives against which the environmental effects of the LACAP have been measured

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species. ⁷⁶
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.
	B4	Condition of semi-natural habitats, species, environmental features or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation.
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.
Landscape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.
	AQN3	Avoid or minimise adverse noise impacts.

⁷⁶ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

Environmental Component	SEO Code	Strategic Environmental Objective
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.
	W5	Prevent impact upon drinking water quality.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.
	MAI3	Promote sustainable transportation.
	MAI4	Promote sustainable waste management.
	MAI5	Promote sustainable water use and drainage management.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change

Appendix 3.2 - Evaluation Matrix - Detailed Evaluation of Environmental Effects of LACAP Implementation

Governance and Leadership

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	General												
1.1	Ensure Climate Change is included in the Risk Register	This action is administrative in nature and will create minor positive effects by reducing paper use and waste generation.	0	0	0	0	0	0	0	0	+	0	+
1.2	Review of building capacity and remote working/ hot desking possibilities for LA staff	This action will likely promote a reduction in transport emissions associated with home to work commuting - which has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	+	0	0	0	+
1.3	Flexitime review considering travel patterns	This action has the potential to reduce the amount of private cars travelling to work at peak times, reducing emissions related to commuting traffic.	0	0	0	0	0	0	+	0	0	0	+
1.4	Annual training of LA staff and elective representatives, on topics specific to their own work	This is a training/personal development related action and has the potential to promote sustainable practices and raise awareness for biodiversity protection and climate action.	0	+	0	0	0	0	+	+	0	0	+
1.5	Integration of Green Public Procurement into all Section work plans	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and services that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.	0	0	0	0	0	0	+	+	0	0	+
1.6	Consideration of climate change in large-scale projects (carbon emission analysis as part of all future analysis) and Water-Sensitive Urban Design Certification	This action will support the delivery of large-scale projects in a manner that is less GHG emission intensive, potentially leading to positive climate and local air quality impacts.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
1.7	Develop system for tagging the costs of climate impacts	Broadly, the action will support the effective delivery of climate action by promoting and awareness and understanding of climate action related issues.	0	0	0	0	0	0	0	0	0	0	+
1.8	Create climate action delivery social media	This promotional/engagement related action will underpin and support the effective delivery of climate action by promoting awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
1.9	Consider endorsing Fossil Fuel Non-Proliferation Treaty	This collaborative action will support the reduction of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	+
1.10	Regional approach to engage libraries to provide online services and reduce paperwork in relation to printing, forms etc.	This action is administrative in nature and will create minor positive effects by reducing paper use and waste generation.	0	0	0	0	0	0	0	0	+	0	+
	Human Resources												
1.11	Climate Action Training for Staff – upskilling of the workforce to ensure they are prepared for and capable of adjusting to the impacts of climate change.	This is a training/personal development related action and has the potential to promote sustainable practices and raise awareness for biodiversity protection and climate action.	0	0	0	0	0	0	0	0	0	0	0
1.12	Job Advertisements/Descriptions – implementation of climate action/green criteria into job descriptions where feasible to demonstrate WCCC’s commitment to the climate transition.	This is an administrative action and will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
1.13	Staff onboarding – integrate information on WCCC’s climate journey into the onboarding process for new staff.	This is an administration action and will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
1.14	Hybrid work policy – demonstrate the benefits of remote work via emissions savings, km of travel avoided etc.	This action will likely promote a reduction in transport emissions associated with home to work commuting - which has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	+	0	0	0	+
1.15	Travel policy – integrate climate action/green criteria into travel policy, review the need for inter-site travel.	This is an organizational related action and will not have a real environmental effect when considered in isolation. It will support the delivery of the plan vision and objectives generally.	0	0	0	0	0	0	0	0	0	0	0
1.16	Flexi-time policy – review the flexi-time policy to reduce traffic congestion, emissions and travel times for staff travelling at peak times. (non-public facing roles)	This action has the potential to reduce the amount of private cars travelling to work at peak times, reducing emissions related to commuting traffic.	0	0	0	0	0	0	+	0	0	0	0
1.17	Deliver an annual Reduce Your Use energy saving campaign	This promotional/educational action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
1.18	Green Champion Award – In partnership with the Climate Action Team, devise a scheme to recognize employees engaged in activities which promote and improve climate action in the workplace.	This promotional/educational action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
	Finance												
1.19	Appropriate recording of the cost of extreme weather to the Council even when there isn't a scheme to claim back funds	Broadly, the action will support the effective delivery of climate action by promoting awareness and understanding of climate action related issues.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
1.20	Business case development to also include long term energy and environmental costs	Broadly, the action will promote the carrying out of more climate positive activities and development. The action is likely to have a slight to moderate positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	+
1.21	Continuation of Commercial Energy Rates Discount Scheme	Broadly, the action will promote the carrying out of more climate positive practices. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	+
1.22	Dedicated annual climate change spend as a proportion of municipal budget or per capita	The action will facilitate the carrying out of more climate positive measures. The action is likely to have a positive effect on the climate environment.	0	0	0	0	0	0	+	0	0	0	+
1.23	County Council investment in partnership for renewable energy projects where a suitable project is identified	<p>This collaborative action will support the reduction of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This plan supports the development of renewable energy infrastructure, which could lead to a variety of slight to potentially significant environmental impacts, including impacts on biodiversity, landscape character and visual amenity, the receiving noise environment; or construction related effects.</p>	0	-	-	0	0	0	+/-	0	0	0	+
1.24	Apply for Pathfinder funding and deliver energy projects and continue to apply for Better Energy Community funding	This action is generally supportive of energy and retrofit projects and may contribute toward achieving GHG emission reductions if successfully implemented.	-	-	0	-	0	+	-	-	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		Such energy or retrofit projects may generate light and air pollution and may negatively impact sensitive environmental receptors and the conservation of protected structures, in the absence of appropriate mitigation.											
1.25	Development of a Green Bond for Waterford	This investment/collaborative action could support climate action projects and could have result in slight positive effects on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	-	0	0	0	0	+/-	-	0	0	+
1.26	Develop a financial instrument to speed up the retrofit of social housing	This action supports retrofit projects and may contribute toward achieving GHG emission reductions within the Residential sector. Such retrofit projects may generate light (glint and glare) and air pollution and may negatively impact sensitive environmental receptors and the conservation of protected structures, in the absence of appropriate mitigation.	-	-	0	-	0	+	-	-	+	0	+

Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape, Seascape & Visual Amenity. CH - Cultural Heritage - Archaeology & Architectural. S - Soils. LU - Land Use. AQN - Air Quality and Noise. W - Water. MA - Material Assets. TR- Tourism & Recreation. CC - Climate Change.

Built Environment and Transport

Actio n Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	Transport												
2.1	Deliver Eco-Driver training to WCCC Fleet staff	This education/training-related action will underpin and support the effective delivery of climate action within the local authority organisation.	0	0	0	0	0	0	0	0	0	0	0
2.2	Replace fossil fuels with renewable fuel in WCCC Fleet	<p>This action will support the local authority in reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight to significant positive environmental effect in terms of fuel efficiency improvements in the local authority vehicle fleet which will reduce/minimise vehicle fleet related GHG emissions. This has the potential to generate some degree of positive effects on climate and local air quality.</p> <p>This action will lead to the LA transitioning its vehicle fleet to a renewable fuel. The scalable adoption of vehicles based on certain alternative fuels may contribute to the expansion of alternative fuel production sectors. These sectors may indirectly cause environmental effects (including uncertain and potentially negative effects) as a result of fuel sourcing, production and supply processes.</p>	0	0	0	0	0	0	+	0	?	0	+
2.3	Replace fossil fuel vehicles with Electric Vehicles (EV) in WCCC fleet	This action will support the local authority in reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight to significant positive environmental effect in terms of fuel efficiency improvements in the local authority vehicle fleet which will reduce/minimise vehicle fleet related GHG emissions. This has the potential to generate some degree of positive effects on climate and local air quality.	0	?	0	0	?	?	+	0	?	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		This action will lead to the LA transitioning its vehicle fleet to electric vehicles. Electric vehicles have the potential to generate a variety of uncertain lifecycle impacts, including production-related impacts and end-of-life related.											
2.4	Deliver the County EV charging strategy and use findings to apply for funding for the residential neighbourhood EV charging scheme in the areas that have been identified as needing charge points	<p>This action will support the local authority in reducing its transport sector GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.</p> <p>This action could also lead to the delivery of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the LA. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including material asset impacts, noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement-based products during construction), and biodiversity impacts.</p>	0	-	0	-	-	0	-	-	+	0	+
2.5	Add to the existing electric bike fleet and give staff the support they need to use the bikes	This action will likely promote active travel options for local authority staff and the reduction in transport emissions associated with home to work commuting using ICE based vehicles - which has the potential to generate some degree of positive effects on climate and local air quality.	+	0	0	0	0	0	+	0	0	0	+
2.6	Deliver E-Mobility Hubs (Electric car, scooter and bike depot) where the public can rent vehicles and facilitate e-car clubs	This action will encourage modal shift to active/sustainable travel modes and the reduction of private car use. It will help fully realise the potential positive environmental effects associated with sustainable/active travel and contribute to a reduction in Transport sector GHG emissions.	+	0	0	0	0	0	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		This action will lead to the development of the E-Mobility Hub, which will likely include multiple charging points and ancillary electrical infrastructure including grid connection routes. In the absence of any mitigation, works involved in the construction of the hub may have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.											
2.7	Research the feasibility of innovative EV charging solutions (floor charging, overhead charging)	This study related action will support the local authority in reducing its transport sector GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	0	0	0	0	0
2.8	Liaise with the NTA to improve systems: -integration between rail and WMATS (North Quays) -Bus stop facilities -Bus Connects	The improvement of public transport systems will encourage modal shift to active/sustainable travel modes and the reduction of private car use. It will help fully realise the potential positive environmental effects associated with sustainable/active travel and contribute to a reduction in Transport sector GHG emissions. This action could support the carrying out of development, however such development is unlikely to be of a significant magnitude or result in significant environmental effects.	0	0	0	0	0	0	+	0	0	0	+
2.9	Collaborate with Active Travel & Area Engineer to identify and work with schools to run a programme for safe routes to school (School Streets). Aim for one school per year in the County.	This action has the potential to encourage modal shift and the use of active travel networks. This action supports the development of additional cycling infrastructure.	+	-	0	0	0	0	+/-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts. This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use. The action has the potential to have a positive impact on population and human health by reducing traffic risk at schools.											
2.10	Percentage of parking spaces changed to cycle parking – review of parking needed and funding of bike parking in suitable areas	This action will promote the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel.	+	0	0	0	0	0	+	0	0	0	0
2.11	Anti-idling programme (Link to air pollution/ Health). Low-cost air pollution monitoring	This awareness-related action will promote community-level climate action and a reduction in transport emissions associated with vehicle idling, which has the potential to generate a slight positive environmental effect on local air quality. The monitoring of air pollution will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	+	0	0	0	0
2.12	Expand air quality monitoring programme to primary schools in towns across the county	This monitoring-related action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
2.13	Develop Fuel Card Policy (including monitoring, KPI - mileage per litre)	This monitoring-related action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
2.14	Identify and put in place suitable incentives to encourage people to Carpool	This action will support a modal shift within the community and the reduction in vehicle related GHG emissions.	0	0	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.15	Manage car parking through Demand Constraints to make active and public transport more appealing	This action has the potential to reduce the use of private cars through the encouragement of public transport or the reduction in parking spaces where appropriate. This will potentially lead to the reduction of vehicle related GHG emissions.	0	0	0	0	0	0	+	0	0	0	0
2.16	Review roundabouts for improvements: Dutch style	<p>This action will promote the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action supports the reallocation of existing road space. In the absence of any mitigation, works involved in the updating of road space have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.</p>	+	-	0	0	0	0	+/-	-	0	0	0
2.17	Deliver a Mobility Plan for the Council and encourage large employers in the city to do the same	This promotional action will support the local authority with the effective delivery of climate action at organisational and community levels. It has the potential to support the realisation of GHG emission reduction in the transport sector.	0	0	0	0	0	0	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	Roads Management												
2.18	Integration of Sustainable Urban Drainage Systems and other nature-based solutions into plan	<p>The action will promote the carrying out of local authority-led development of nature-based solutions and SuDS and has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>The construction of Nature Based SuDS could potentially have a variety of significant, negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), the receiving noise environment (due to the generation of construction phase noise), and the receiving human environment.</p>	-	+/-	0	0	0	0	-	+/-	0	0	0
2.19	Engage with Active Travel goals - secure cycle parking in main car parks, cycle lanes designed for daily commuter use (segregated if possible, curbing not plastic wands, design process to include consultation with cycling community)	<p>This action supports the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel.</p> <p>This action supports the development of additional cycling and walkway infrastructure. In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.</p>	+	0	0	0	0	0	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.20	Cycle priority at junctions to enhance safety and promote safe cycling. Incorporation of Advance Stop Lines (bike box) for cyclists at junctions	This action is unlikely to have significant negative environmental effects. This action has the potential to encourage modal shift and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel.	+	0	0	0	0	0	+	0	0	0	0
2.21	Move away from temporary car parks to reduce car-orientated infrastructure	This action will promote the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift and the use of active travel modes and networks and may lead to reduced internal combustion engine based vehicle use and associated GHG emissions and local air quality impacts. It will help fully realise the potential positive environmental effects associated with sustainable/active travel.	+	0	0	0	0	0	+	0	0	0	0
2.22	Reduction of the heat island effect in urban areas (green areas as well as paving in any pedestrianisation, increased tree cover)	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality, biodiversity, and landscape and visual amenity.	0	+	+	0	0	0	+	0	0	0	0
2.23	Make European Car Free Day/Clean Air Days/Bike Week part of the local agenda on an annual basis	This promotional/awareness action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
2.24	Identify traffic "hot spots" and implement management plans	This action will likely promote a reduction in transport emissions associated with vehicle idling - which has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	0	0	0	0	0
2.25	Trial of new road materials with lower carbon values in partnership with TII	This action will support the local authority in reducing its embodied GHG emissions associated with construction materials in line with climate policy and legislation and emission reduction targets. It will result in some degree of positive effect on the climate environment.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.26	Speed limit review as per Waterford Metropolitan Area Transport Strategy - 30km/hr on urban roads	This action will have no real environmental effect when considered in isolation. The implementation of the action may lead to slight potential positive effects on air quality - in terms of the reduction of GHG emissions associated with fossil fuel burning in vehicles. However, the reduction of speed limits on roads may lead to negative impacts on traffic and transport (through traffic congestion).	0	0	0	0	0	0	+	0	-	0	0
2.27	Survey of roads/ bridges/ infrastructures vulnerable to extreme weather events, produce vulnerability report and reinforce those structures	This action has the potential to adversely affect Annex II and IV species such as Daubenton's Bat through disturbance and habitat loss or impact protected structures if incorrectly implemented. Such work also has the potential to negatively impact the status of bridges/infrastructures that constitute protected structures or that have cultural heritage value attached to them.	0	-	0	-	0	0	0	0	0	0	0
2.28	Enforcement of laws against parking on footpaths or in disabled spaces/higher footpaths to discourage illegal parking. Ensure that all footpaths are sufficiently higher than the adjoining roadway to discourage parking on footpaths	This action will promote the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel.	0	0	0	0	0	0	0	0	0	0	0
2.29	Ensure reuse of road plannings and other materials	The implementation of this action is likely to improve resource efficiency/circularity and will support the reduction of lifecycle GHG emissions associated with the production of road materials. This is likely to result in a positive environmental effect generally.	0	0	0	0	0	0	0	0	0	0	+
2.30	Engage with TII to implement Green Procurement priority in road specifications	This engagement action will support the local authority and its partners in reducing its embodied GHG emissions associated with construction materials in line with climate policy and legislation and emission reduction targets. It will result in some degree of positive effect on the climate environment.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.31	Inclusion of Climate Change in Asset Management software (MapRoads)	This action will support the local authority in reducing its organizational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	+
2.32	Identifying 'Critical Infrastructure Routes' for emergency services in extreme weather	This is a study related action that will have no real environmental effect when considered in isolation. This action has the potential to have slight positive effects on built, natural and cultural heritage assets and the amenity value attained by people from these assets.	0	0	0	+	0	0	0	0	0	0	0
	Planning												
2.33	Prepare and apply a protocol to enable and require a pre-set standard for 'Climate Proofing' including water sensitive urban design, Rainwater Management Plans, and Life Cycle Assessment of all local authority led plans, purchases and investment	<p>Broadly, the action will promote the carrying out of more climate-positive local authority-led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.</p> <p>The implementation of climate-proofing in plans and projects, such as the promotion of active travel, stormwater management, or flood resilience-related development, could lead to unforeseen and unintended environmental effects in the absence of appropriate mitigation.</p>	0	+/-	0	0	0	0	+	+/-	+	0	+
2.34	Planning decisions process to assess impact of new development proposed in areas determined to have a water supply and quality constraint (i.e., from climate related drought, extreme rainfall events). Assess impact on wastewater discharges and DWWTS and mitigate impacts.	This action has the potential to have wide ranging slight to significant effects on water quality. The assessment process and guidance developed have the potential to lead to the improvement of wastewater management and may support positive impacts on water quality.	0	0	0	0	0	0	0	+	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.35	Regular programme of climate training for Planners (including whole life cycle assessment, rainwater management, Sustainable Urban Drainage etc)	This training-related action will have no real environmental effect when considered in isolation, however, the action will underpin and support the delivery of effective stormwater management and sustainable urban drainage design by promoting awareness of climate issues related to surface water.	0	0	0	0	0	0	0	+	0	0	0
2.36	Carry out a geothermal survey of the county to identify areas with the greatest opportunity for heat production near Council buildings. Survey will include a feasibility assessment for the incorporation of Geothermal into existing heating systems.	This study-related action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
2.37	Life Cycle Analysis methodology, consideration of carbon emissions, and consideration of water quality impact to be used in housing and building works planning and for planning permission from 2027 following adoption of National Policy on Life Cycle Assessment.	Broadly, the action will promote the carrying out of more climate positive development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	0
2.38	Support new privately owned regeneration through facilitating a cooperative community with a collective skillset to tackle renovation projects from within its own resources, building upon work conducted under the URDF	This action will support retrofitting/upgrading works on old buildings which could result in significant negative effects if unmitigated. There will be adverse effects on Bats which are Annex IV species, as many roosts are located within old unused buildings. There is also potential for light (glint and glare) and air pollution during retrofitting works.	0	-	0	0	0	0	+/-	0	0	0	0
2.39	Any new homes bought by WCCC built to Zero Carbon from 2025	Broadly, the action will promote the carrying out of more climate-positive local authority-led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.40	Inclusion of original hedgerows as a feature within green site development (sightlines allowing)	Broadly, the action will promote the carrying out of more climate-positive local authority-led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	0
	Active Transport												
2.41	Request TFI bicycles to be extended further out of the city	This action has the potential to encourage modal shift within the community and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel - including air quality impacts and population and human health.	+	0	0	0	0	0	+	0	0	0	0
2.42	Bicycle Delivery trial for business in Dungarvan and Kilmacthomas	This action has the potential to encourage modal shift within the community and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel - including air quality impacts and population and human health.	+	0	0	0	0	0	+	0	0	0	0
2.43	Assessment of existing Bicycle Libraries to establish feasibility in Waterford County	This study-related action will have no real environmental impact when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
2.44	Additional km of upgraded footpaths by 2029 - 23.16 in the County, 3km in the City	This action has the potential to encourage modal shift within the community and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel - including air quality impacts and population and human health. This action supports the development of additional walkway infrastructure.	+	-	0	-	0	0	+	-	+/-	0	0

Actio n Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<p>In the absence of any mitigation, works involved in the construction of additional walkway infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), biodiversity impacts, cultural heritage asset impacts and impacts on traffic and transport (through the temporary creation of traffic diversions and congestion).</p> <p>The ongoing operation of walkway infrastructure may have a slight to significant effect on traffic flows associated with other modes of transport, in the absence of proper design of such networks at the outset and additional mitigation as may be required.</p>											
2.45	Additional km of new cycle lanes - 10.62km in the County, 33.92km in the city	<p>This action has the potential to encourage modal shift within the community and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel - including air quality impacts and population and human health.</p> <p>This action supports the development of additional cycling infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), biodiversity impacts, cultural heritage asset impacts and impacts on traffic and transport (through the temporary creation of traffic diversions and congestion).</p>	+	-	0	-	0	0	+	-	+/-	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The ongoing operation of cycling infrastructure may have a slight to significant effect on traffic flows associated with other modes of transport, in the absence of proper design of such networks at the outset and additional mitigation as may be required.											
2.46	Use asphalt art in street design to trial different street layouts that promote Active Travel	This action will promote the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift within the community and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel - including air quality impacts and population and human health.	+	0	0	0	0	0	+	0	0	0	0
2.47	Review of car parking spaces once Active Travel, Car Pool and Public Transport have been put in place and consider change of use of small areas (gardens, skate parks etc)	<p>This action will promote the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action supports works involved in the updating/change of car parking space are minor in nature and will not generate any significant negative environmental effect.</p>	+	0	0	0	0	0	+	0	0	0	0
2.48	Cycle parking target - cycle parking for 5,000 bikes across the County	This action has the potential to encourage modal shift within the community and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel - including air quality impacts and population and human health.	+	-	0	-	0	0	+	-	+/-	0	0

Actio n Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<p>This action supports the development of additional cycling infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), biodiversity impacts, cultural heritage asset impacts and impacts on traffic and transport (through the temporary creation of traffic diversions and congestion).</p> <p>The ongoing operation of cycling infrastructure may have a slight to significant effect on traffic flows associated with other modes of transport, in the absence of proper design of such networks at the outset and additional mitigation as may be required.</p>											
2.49	Investigate renewable back-up power generation for servers vulnerable to power outages (Dungarvan)	<p>This action will support the local authority in reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets.</p> <p>This action has the potential to support the renewable energy development, which could have unintended negative environmental effects.</p> <p>In the absence of any mitigation, works involved in the development of renewable energy infrastructure could have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.</p>	0	-	0	0	0	0	+/-	-	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.50	Inclusion of appropriate records management in staff Green Team Challenge	This action is administrative in nature and will have no real environmental effect when considered in isolation. The action will support the effective delivery of climate action in the local authority organisation.	0	0	0	0	0	0	0	0	0	0	0
2.51	Management system for removing articles after statutory period for keeping them has lapsed	This action is administrative in nature and will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
2.52	Use WatMaps to provide information on sustainability features for public access	This engagement action will support the effective delivery of climate action within the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
2.53	Develop a County Heritage Plan and Biodiversity Plan with climate action as a cross-cutting theme/goal (Climate Proofed)	<p>This action has the potential to have significant positive effects on built, natural and cultural heritage assets and the amenity value attained by people from these assets.</p> <p>This action has the potential to support carrying out retrofitting/upgrade/maintenance works at historic structures, traditional buildings and monuments which could result in significant negative effects if unmitigated.</p> <p>This action has the potential to have adverse effects on Bats which are Annex IV species, as many roosts are located within old unused buildings.</p>	0	-	0	+/-	0	0	0	0	0	0	0
2.54	Undertake climate risk assessment of local authority owned built heritage assets to identify buildings likely to be impacted by extreme weather or erosion	This assessment based action has the potential support to the protection of built and cultural heritage assets.	0	-	0	+/-	0	0	0	0	0	0	0
2.55	Regionally develop projects to promote adaptive reuse of historic structures using exemplar retrofitting projects, life cycle assessment and carbon budgets to demonstrate climate value	This action will work to protect existing infrastructure against potential harm caused by climate change.	0	-	0	+/-	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		In the absence of appropriate mitigation, such retrofitting works may have slight to significant impacts on protected structures, the heritage context in which protected structures sit or on protected species that may be present in old buildings.											
2.56	Ensure climate-proofing of heritage funding administered by WCCC, with an emphasis on improved energy performance along with the main goal of conservation of buildings.	This assessment based action has the potential support to the protection of built and cultural heritage assets.	-	-	0	0	0	0	-	0	0	0	0
2.57	Design an innovative and creative project to use archaeological (or other) sites to creatively engage local communities with climate change and heritage and to demonstrate the impacts of climate change	This engagement action will support the local authority with the effective delivery of climate action within the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
2.58	Create a training programme for local authority staff in the use of traditional materials and skills e.g., lime and stonemasonry, to assist in conducting the conservation of traditional structures to increase their climate resilience and raise awareness of the importance of traditional skills and materials	This is an education-related action. The implementation of the action will have no real environmental effect when considered in isolation. The action will serve to promote organisational climate action and the development of climate-positive policies.	0	0	0	0	0	0	0	0	0	0	0
2.59	Targeting of social homes still using solid fuels, or older social homes, as priority of retrofitting program	This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for light (glint and glare) and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.	0	0	0	0	0	0	+/-	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.60	Continue moving to central heating systems only	<p>This action has the potential to lead to positive effects on the climate sector and result in the reduction of Residential sector GHG emissions and lifecycle GHG emissions associated with construction materials and projects.</p> <p>There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.</p>	0	-	0	0	0	0	+/-	0	0	0	0
2.61	Continue delivering the Croi Conaithe programme, bringing vacant homes back to use	<p>This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.</p>	0	-	0	0	0	0	+/-	0	0	0	+
2.62	The use of Building Passports to increase BERs and building energy performance incrementally	<p>This action has the potential to lead to positive effects on climate and result in the reduction of Residential sector GHG emissions and lifecycle GHG emissions associated with construction materials and projects.</p>	0	-	0	0	0	0	+/-	0	0	0	0
2.63	Management of greens to incorporate nature	<p>This action has the potential to lead to positive effects on climate by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality and biodiversity.</p>	0	+	0	0	0	0	+	0	0	0	0
2.64	Avoid fossil fuel heating systems and continue to replace coal and oil heating systems	<p>This action will support the reduction of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p>	0	-	-	0	0	0	+/-	-	-	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.											
2.65	BER study on all social housing without a BER	<p>This study action will have no real environmental effect when considered in isolation, however, will support the local authority in reducing Residential GHG emissions in line with climate policy and legislation and emission reduction targets through retrofitting works generally.</p> <p>Depending on the outcome of the study, the action has the potential for light and air pollution during retrofitting works. The installation of PV panels has the potential to result in negative glint and glare impacts on sensitive environmental receptors. Therefore, there is also scope for there to be negative effects on cultural heritage if unmitigated.</p>	-	0	0	-	0	0	+/-	0	0	0	0
2.66	Comparison study of energy efficient social housing with traditional social housing regarding fuel costs, air pollution, water efficiency etc.	This study action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
2.67	Upgrade at least 25% of social houses (E/F/G BER to BER B2 or higher). This figure is based on the current funding allocation and may increase.	<p>This action has the potential to lead to positive effects on the climate sector and result in the offset of Residential sector GHG emissions and lifecycle GHG emissions associated with construction materials and projects.</p> <p>There is the potential for light (glint and glare) and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.</p>	0	-	0	0	0	0	+/-	0	0	0	+
2.68	Develop a number of Virtual Power Plants in the county where houses in Energy Poverty will be able to buy excess energy produced by solar PV on community buildings at a reduced rate - partnership project with SEEA	This action will not have any real environmental effect when considered in isolation. This action has the potential to promote the use of renewable energy, reducing GHG emissions.	0	0	0	0	0	0	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.69	50% improvement in energy efficiency across all Council operations	<p>This action will support the local authority in reducing its GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.</p> <p>This action could lead to the development of renewable technology which has the potential to create unintended localized, negative environmental impacts, including impacts on visual amenity.</p>	0	0	0	0	0	0	+	-	0	0	+
2.70	Phase out fossil-fuel based boilers from Council buildings by 2025.	<p>This action will support the local authority in reducing its GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.</p> <p>This action could lead to the development of renewable technology which has the potential to create unintended localized, negative environmental impacts, including noise and dust related impacts.</p>	0	0	0	0	0	0	+	-	0	0	+
2.71	Replace streetlighting with LED energy efficient equivalents and enable lighting controls to save energy	<p>This action broadly supports the reduction of County GHG emissions in line with climate policy and legislation and emission reduction targets. The opportunity is likely to have a slight positive environmental effect in terms of GHG emissions. However, the spectrum of light from LED sources has the potential to impact nocturnal species. Therefore, there is also scope for there to be slight negative effects if unmitigated.</p>	0	-	0	0	0	0	+	0	0	0	+
2.72	Addition of renewable energy to Council buildings that have a floor area of greater than 250m2 and do not have conservation restrictions	<p>This action will support the local authority in reducing its GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.</p>	0	0	0	0	0	0	+	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		This action could lead to the development of renewable technology which has the potential to create unintended localized, negative environmental impacts, including impacts on visual amenity.											
2.73	Source electricity with 100% renewables content - coordinated effort with other Councils	This action will support the local authority in reducing its GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	+	-	0	0	+
2.74	Assess Council land for Renewable Energy suitability. A target for example of 5MWh of installed capacity across the County developed in conjunction with a community (s) would require a solar farm of a 10ha size could be achieved.	<p>This action will support the local authority in reducing its GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.</p> <p>This action supports the development of renewable technology which has the potential to create unintended localized, negative environmental impacts, including impacts on water quality.</p>	0	0	0	0	0	0	+	-	0	0	+
2.75	Space review for office space - hot desking policy to follow	Generally, this action will promote climate awareness within the community. This action has the potential to have positive environmental effects. This action has the potential to contribute to a degree to reducing the level of GHG emissions associated with the reduction in transport use.	0	0	0	0	0	0	+	0	0	0	0

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Natural Environment and Green Infrastructure

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	Natural Heritage and Biodiversity												
3.1	Complete county habitat and ecosystem service surveys with a focus on carbon sinks and stores and identify sites suitable for restoration (wetlands, woodlands, sand dunes, saltmarsh and sea grass beds).	<p>This action has the potential to negatively affect biodiversity if misguided or have inappropriate regimes.</p> <p>This action has the potential to have wide ranging slight to moderate positive effects on local biodiversity, flora and fauna.</p>	0	+/?	0	0	0	0	0	0	0	0	0
3.2	Develop a County Biodiversity Plan with climate action as a cross-cutting theme/goal. Use the County Biodiversity Plan as a vehicle to highlight a range of biodiversity opportunities that can be taken up at farm level with particular emphasis on the new ECO scheme. Highlight schemes for biodiversity opportunities available to farmers	<p>This action has the potential to have wide ranging slight to moderate positive effects on local biodiversity, flora and fauna.</p>	0	+	0	0	0	0	0	0	0	0	0
3.3	Undertake climate risk assessment of local authority owned natural heritage assets and prepare reinforcement works for those assets that need protection	<p>This is a study-related action that will have no real environmental effect when considered in isolation.</p>	0	0	0	0	0	0	0	0	0	0	0
3.4	Support the establishment of a National Climate Framework similar to the National Pollinator Plan where resources and knowledge is provided to the public on Climate Action	<p>This promotional/educational action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.</p>	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.5	Develop nature-based flooding approaches in collaboration with relevant stakeholders. Assessment made at whole-catchment level (catchment as the management unit). Prioritise delivery of Catchment Flood Risk Assessment and Management (CFRAM)	<p>This flood resilience related action has the potential to lead to significant development taking place including development at and in the vicinity of water bodies.</p> <p>In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; and the receiving air environment (due to the generation of construction dust).</p> <p>Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SUDS as part of surface water management has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p>	+	+/-	0	0	+	0	-	+/-	0	0	0
3.6	Source and operate a tree health management app to identify trends in tree health and to maximise the chances of successful planting. The app will be used to manage all County Council cared-for trees	This action has no real environmental effect when considered in isolation. This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality, biodiversity, and landscape and visual amenity.	0	+	+	0	0	0	+	0	0	0	+
3.7	Continue Marram grass planting and dune stabilisation works where possible. Investigate other options such as beach nourishment and measures similar to the Dutch Sand Engine	This action has the potential to have positive effects on biodiversity and European Sites.	0	+	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.8	Map green infrastructure (GI) – identify wildlife corridors, conservation and restoration spaces. Under the County Development Plan a Blue Green Infrastructure Strategy is being developed.	This action has no real environmental effect when considered in isolation. This action has the potential to lead to positive effects on the climate environment by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality, biodiversity, and landscape and visual amenity.	0	+	+	0	0	0	+	0	0	0	+
3.9	To carry out a feasibility assessment to determine if it is possible to identify waterbodies that are both particularly vulnerable to extreme water events associated with climate change, and at risk of not meeting the requirements of the EU Water Framework Directive.	This is a study related action that will have no real environmental effect when considered in isolation. Depending on the results of the assessment, there is potential to have slight to significant, positive effects on biodiversity and water quality.	0	+	0	0	0	0	0	+	0	0	0
3.10	Conduct a public awareness campaign on maintenance of roadside trees to reduce unnecessary felling of healthy trees and loss of carbon stock. (Inclusion of guidance in yearly letters)	This promotional/educational action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
3.11	Prepare a guidance document and training on the importance of, quality rating and sustainable management of the hedgerows and riparian areas, for Council staff and external stakeholders including farmers/landowners.	This education-related action will promote the protection and enhancement of native hedgerow and has the potential to generate slight to significant effects for biodiversity in the county. The action will also serve to promote the development of climate-positive policies.	0	+	0	0	0	0	0	0	0	0	0
3.12	Deliver a yearly increase in tree planting on local authority lands and in private and public	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality and biodiversity.	0	+	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.13	Identify sites for large scale native and mixed woodland planting and set targets for planting and maintaining native trees in urban and rural areas. Where possible tree pits should integrate into the surface water drainage to provide water quality benefits.	This is a study-related action that will have no real environmental effect when considered in isolation. Depending on the results of the study, there is potential to have slight to significant, positive effects on biodiversity and water quality.	0	+	0	0	0	0	0	+	0	0	0
3.14	Zostera (Seagrass) Bed survey in Dungarvan and Tramore followed by a protection and awareness programme and ongoing monitoring	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality and biodiversity.	0	+	0	0	0	0	+	0	0	0	0
3.15	Incorporation of biodiversity gains rather than just minimising loss of biodiversity into Development Management Standards	This action has the potential to negatively affect biodiversity if misguided or have inappropriate regimes. Generally, this action has the potential to have wide ranging slight to moderate positive effects on local biodiversity, flora and fauna.	0	+/?	0	0	0	0	0	0	0	0	0
3.16	Identify sites and opportunities to work with other agencies and communities on restoration of water levels and 'slow the flow' measures to mitigate flood risk.	The progression of flood resilience related action has the potential to lead to significant development taking place at and in the vicinity of water bodies. In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), and the receiving human environment Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SuDS as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.	+/-	+/-	0	+	0	0	-	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The delivery of flood resilience action also has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including ecological receptors.											
3.17	Deliver on a yearly increase in the application of Blue-Green Infrastructure, Nature Based-Solutions (NBS) and Integrated Rainwater Management in local authority, private and public projects. Collate a database and spatial map to track progress.	<p>The development of nature-based solutions as part of surface water management has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>The development of such green infrastructure, in particular construction related activity has the potential to have a range of unintended, negative environmental impacts if carried out.</p>	0	+/-	-	0	0	0	-	+/-	0	-	0
3.18	Support the delivery of creative projects to address Climate Action and Resilience	This promotional/engagement action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
3.19	Prepare strategic wildfire management plan for high-risk areas	<p>This action has the potential to negatively affect biodiversity and European Sites through certain management practices to prevent wildfires.</p> <p>This action will promote the protection of biodiversity from climate change-influenced hill and forest fire risks - and has the potential to have wide-ranging slight to significant positive effects on local biodiversity.</p>	0	+/-	0	0	0	0	0	0	0	0	0
3.20	Investment in increased green space in urban areas including a park of regional significance in Waterford city	This action has the potential to lead to positive effects on the climate environment, by promoting an additional degree of GHG emission sequestration. It also has the potential to lead to positive effects on local air quality, biodiversity and population and human health.	+	+	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The development of an amenity parkland may generate environmental effects, including construction related effects and effects on existing traffic and transport conditions											
3.21	Support the development of a nature corridor across a number of rural communities in Waterford	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality and biodiversity.	0	+/-	0	0	0	0	+	-	0	0	0
3.22	Act on the findings of the Copper Coast stabilisation report	<p>The carrying out of coastal protection has the potential to lead to significant development taking place at and in the vicinity of the coast.</p> <p>In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, including flora and fauna reliant on aquatic ecosystems; and the receiving air environment (due to the generation of construction dust).</p> <p>This action is likely to have slight to significant positive effects on the receiving soils environment - through the prevention of coastal erosion. This may also have a beneficial impact on inter-related environmental effects.</p>	-	+/-	0	0	+	0	-	+/-	0	0	0
3.23	Input Nature Recovery Law targets when they are put in place	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality and biodiversity.	0	+	0	0	0	0	+	0	0	0	+
	Water Quality												
3.23	Signpost farms towards the Teagasc emissions reduction programme on Farm Inspection Visits	This action has the potential to benefit water quality, biodiversity, and sustainability initiatives in the county.	+	+	0	0	+	0	+	+	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.24	Deliver a number of water protection projects focused on preventing nitrate run off from farms	This action has the potential to promote climate action within the agricultural community and benefit water quality and biodiversity in the county.	0	+	0	0	0	0	0	+	0	0	0
3.25	Investigate the possibility of using seaweed at the coast to reduce the amount of nitrates going near Seagrass plantations	This is a research related action and will have no real environmental effect when considered in isolation. This action has the potential to benefit water quality and biodiversity generally.	0	+	0	0	0	0	0	+	0	0	0
3.26	Support and inform a climate-proofing programme for natural water resources to manage flooding at the catchment level. Through advising the farming community and running information campaigns..	<p>This is a study related action and will have no real environmental effect when considered in isolation. Generally, the action will support the delivery of improved flood resilience at the catchment level by identifying opportunities for flood resilience improvements.</p> <p>The possible development of nature based solutions as part of a flood resilience programme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>In the absence of any mitigation, such development could potentially have a variety of negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems.</p>	+/-	+/-	0	+	0	0	+/-	-	0	0	+
3.27	Increase the amount of permeable spaces in the County. Ensure that new housing and streetscapes incorporate permeability (Nature Based Solutions and Sustainable Urban Drainage Systems)	<p>The development of nature-based solutions and SuDS has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>The construction of Nature Based SuDS could potentially have a variety of significant, negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust),</p>	-	+/-	0	0	0	0	-	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		the receiving noise environment (due to the generation of construction phase noise), and the receiving human environment.											
3.28	Increased rainfall to be taken into account at building design stage and rainwater harvesting	The action will promote the carrying out of local authority-led development and has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.	0	+	0	0	0	0	+/-	+	0	0	+
3.29	Carry out a review of Section 4 Discharge to Water Licenses to determine if they are fit for purpose to meet projected climate change related risks such as hydrological changes and water temperature increases.	This monitoring action will have no real environmental effect when considered in isolation. This action has the potential to contribute to the creation of slight positive environmental effects on climate, biodiversity, water quality and hydrology.	0	+	0	0	0	0	0	+	0	0	+

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Communities: Resilience and Transition

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	Economic Development/Communities												
4.1	Climate proofing of Community Funded Projects (e.g., Town & Village) (Sustainability and Climate Change scoring on grant assessment)	<p>Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.</p> <p>The implementation of climate proofing in plans and projects, such as the promotion of active travel or flood resilience related development, could lead to unforeseen and unintended environmental effects in the absence of appropriate mitigation.</p>	+/-	-	-	+/-	0	0	+/-	+/-	0	0	+
4.2	Deliver on the Climate Actions in the LECP	This action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
4.3	Support & encourage sustainable energy communities to engage in climate action at local level through the provision of Bridge funding for Energy master Plans under the MOU through the SEAI SEC Programme	This action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	-	-	0	0	0	0	+/-	0	0	0	+
4.4	Incorporating Climate Actions in Heritage Week, Biodiversity Week, Green Schools and Heritage in Schools (Run by Heritage Council)	This educational/awareness-related action will underpin and promote climate action within the community.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5	Renewable Energy Use for festivals. Review affordability of HVO generators from local suppliers. Review infrastructure needed to put in mains power for future festivals.	<p>This action will support the local authority in reducing county GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect in terms of fuel efficiency improvements in festivals which will reduce/minimise GHG emissions. This has the potential to generate slight positive effects on climate and local air quality.</p> <p>This action will lead to festival businesses transitioning to a renewable fuel. The adoption of alternative fuels in festivals transportation/food trucks may contribute to the expansion of alternative fuel production sectors. These sectors may indirectly cause environmental effects (including uncertain and potentially negative effects) as a result of fuel sourcing, production and supply processes.</p>	0	0	0	0	0	0	+	0	?	0	+
4.6	Engagement/education plan for businesses about city centre transport & pedestrianisation using case study	This engagement/educational action has the potential to encourage modal shift to active/sustainable travel modes and the reduction of private car use. It will help fully realise the potential positive environmental effects associated with sustainable/active travel and contribute to a reduction in Transport sector GHG emissions.	0	0	0	0	0	0	+	0	0	0	0
4.7	Develop an engagement/education plan for biodiversity/pollinator areas for community groups	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of biodiversity related issues. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
4.8	Undertake a feasibility study into sustainable transport methods in festival/event transport planning	This study-related action has no real environmental effect in and of itself. Depending on the outcome of the study, it has the potential to have slight positive environmental effects on climate and local air quality.	0	0	0	0	0	0	+	0	?	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.9	Identify green criteria for procuring the work of artists & vendors, and sustainability criteria for tenders & grants (ISO 14001).	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and service that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.	0	0	0	0	0	0	0	0	0	0	+
4.10	Continue to support and promote remote working hubs	This action will likely promote a reduction in transport emissions associated with home to work commuting - which has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	+	0	0	0	+
4.11	Develop a Toolkit for communities and organisations (SETU, LEO) to deliver climate action, support sustainability reps where appropriate. List of actions.	This action is likely to promote energy efficiency and reduce commercial sector GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	+	0	0
4.12	Growing Waterford' project deliver for food growing with schools, libraries, households (funding dependant)	The action has the potential to lead to a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. It could also lead to positive environmental effects on biodiversity, flora and fauna generally.	0	0	0	0	0	0	+	0	0	0	+
4.13	Develop an engagement/education plan for businesses on circular economy	The implementation of the action will have no real environmental effect when considered in isolation. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the commercial sector.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.14	Incorporate climate action considerations into events. Implement use of strong branding for low emission projects.	This action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
4.15	Climate proof funding programmes – use of materials, waste, review policy on single-use products.	This action is likely to promote effective waste management and waste/material circularity, and in particular, reuse of waste/material. It will broadly support the reduction of lifecycle carbon emissions associated with the production of materials and goods anew. This is likely to result in a positive environmental effect generally.	0	0	0	0	0	0	+	0	+	0	+
4.16	Plan events around 'playful city' principles, E.g. Community Car Free afternoons on Sundays or on days of community festivals	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and encouraging modal shift to active travel. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
4.17	Online application portal for Waterford Communities Funding	This action will have no real environmental effect.	0	0	0	0	0	0	0	0	0	0	0
4.18	Increase in number of community gardens & rewilding projects on greens and spaces operated by the Council	This action has the potential to lead to positive effects on the climate environment by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality, biodiversity, population and human health, and landscape and visual amenity.	+	+	+	0	0	0	+	0	0	0	0
4.19	Support & encourage sustainable energy communities to engage in climate action at local level through the provision of Bridge funding for Energy master Plans	The promotion of community climate action projects has the potential to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.20	Fulfilling green tech and climate change commitments under LEADER Programme 2023 to 2027	This engagement action will support the effective delivery of climate action in the commercial sector. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
4.21	Deliver the Community Climate Action Fund overseeing the delivery of up to 30 climate action projects across the county	The promotion of community climate action projects has the potential to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	+
4.22	Deliver a Carbon Neutral Waterford Business programme with businesses across the County	This engagement action will support the effective delivery of climate action in the commercial sector. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
4.23	Put in place a Coast Guardians programme to report on local erosion and environmental issues to the Council	This action could lead to a slight positive environmental effect on the soils environment and other environmental sensitives impacted by soil erosion.	+	0	0	+	+	0	0	0	0	0	0
4.24	Deliver roaming "Climate Cafes" across Waterford where people can come to discuss Climate Change and the opportunities there are in their lives to save energy, access grants etc	This engagement action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
4.25	Support the delivery of business actions in the LECP such as the creation of a sustainable business competition, supports for businesses transitioning to the green economy and collaboration with large employers in the County.	This engagement action will support the effective delivery of climate action in the commercial sector. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.26	Climate action team presence at festivals to raise awareness of Climate issues and opportunities	This engagement action will support the effective delivery of climate action in the community by promoting awareness and understanding of climate changed-related issues. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
4.27	To cater for climate change immigrants/refugees that have been displaced due to severe climatic weather events as decided by the relevant govt dept.	This action will have no real environmental effect.	0	0	0	0	0	0	0	0	0	0	0
4.28	Campaign to promote locally produced and organic food, include training in appropriate sales and marketing for farmers and sellers to local markets. Highlighting the work of GIY and similar organisations	This education/awareness related action will underpin and support the effective delivery of the locally sourced and sustainable food concept. The promotion of local food production may support the reduction of lifecycle GHG emissions associated with food sourced from afar.	0	0	0	0	0	0	+	0	0	0	+
4.29	Prepare feasibility study to facilitate a pilot Anaerobic Digester project in conjunction with other stakeholders (farmers, agri-business and others)	This action will have no real environmental effect. This action has the potential to lead to the development of anaerobic digestion facility which have the potential to create unintended localised, negative environmental impacts, including odour effects or effects on traffic, biodiversity, European sites, landscape character and visual amenity, or soil, hydrological or water quality related effects. This action has the potential to lead to renewable energy development at the site and GHG emissions reductions.	0	-	-	0	-	0	+/-	-	+/-	0	0
4.30	Create a map on WatMaps where Climate Action locations and project details can be logged and accessed by the public	This educational/promotional action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.31	Create regular Climate Communications to keep the public up to date on how they can contribute to Climate Action in Waterford	This communication/engagement action will support the effective delivery of climate action in the community and the commercial sector. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	0
4.32	Guided by the Memorandum of Understanding signed between the GAA and CCMA, towards working together on sustainability and climate action projects, engage with the Green Club Programme	<p>This promotional/engagement action will underpin and support the effective delivery of climate action in the GAA and CCMA community by promoting and awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.</p> <p>This action will support the promotion of good environmental management at GAA Clubs and CCMA and has the potential to generate some degree of positive effects on biodiversity and climate.</p>	0	+	0	0	0	0	0	0	0	0	+

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Sustainability and Resource Management

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	Waste												
5.1	Circular Economy application of C&D waste at Local Authority sites - improving segregation, reuse and recycling	This action will support the local authority in reducing its embodied GHG emissions associated with construction materials in line with climate policy and legislation and emission reduction targets.	0	0	0	0	0	0	+	0	+	0	+
5.2	Reduce waste volumes in-house by 40%	This action will result in reduced waste production, lowering LA GHG emissions.	0	0	0	0	0	0	+	0	+	0	0
5.3	Increase % of municipal waste recycled from municipal buildings annually	The action is likely to have a significant positive environmental effect through a reduction in waste being sent to landfill.	0	0	0	0	0	0	+	0	+	0	0
5.4	Provide printing figures to staff to raise awareness of paper wastage	This action will promote climate action and raise awareness within the local authority organisation. This action will create minor positive effects including reducing paper use and waste generation. It will also have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	+	0	+
5.5	Facilitate Repair and Reuse pop up shops	Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	+	0	0
5.6	Implement e-signatures for forms to save paper	This action is administrative in nature and will create minor positive effects by reducing paper use and waste generation.	0	0	0	0	0	0	0	0	+	0	+
5.7	Implement public water fountains across the city and county	This action will have no real environmental effect. The works involved in installing the water fountains are minor in nature.	0	0	0	0	0	0	0	0	0	0	0
5.8	Council green waste to be used in the bioeconomy	This action can lead to positive effects on material assets and climate.	0	0	0	0	0	0	0	0	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
5.9	Ensure that Circular Economy principles are adhered to when furnishing and decorating Council buildings	This action can lead to positive effects on material assets and climate.	0	0	0	0	0	0	0	0	+	0	+
5.10	Enhance the rollout of the bring bank sensor scheme	This action can lead to positive effects on material assets and climate.	0	0	0	0	0	0	0	0	+	0	+
5.11	Run waste engagement campaigns through the library services including events such as seed library exchanges, clothes swaps and repair cafes.	The implementation of this action is likely to promote effective waste management and waste/material circularity. Any measures that improve resource efficiency/circularity will broadly support the reduction of lifecycle GHG emissions associated with the production of materials and goods. This is likely to result in a positive environmental effect generally.	0	0	0	0	0	0	0	0	0	0	+
Green Public Procurement													
5.12	GPP "reboot" strategy to integrate GPP into all Council practices	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and services that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.	0	0	0	0	0	0	0	0	0	0	+
5.13	Devise "interactive" training for the E-tenders platform to ensure all staff involved in tendering are comfortable with the platform.	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and services that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.	0	0	0	0	0	0	0	0	0	0	+
5.14	Ensure market engagement with GPP and circular economy principles (where feasible)	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and services that have a reduced environmental impact.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.											
5.15	Instate recurring cross-departmental meetings to report on GPP implementation progress across the Council	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and services that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.	0	0	0	0	0	0	0	0	0	0	+
5.16	Staff Training for Green Public Procurement	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and services that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.	0	0	0	0	0	0	0	0	0	0	+
5.17	Develop a GPP guidance booklet for staff i.e., a how-to guide for GPP	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and services that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally.	0	0	0	0	0	0	0	0	0	0	+

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Decarbonising Zone

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 1.1	Facilitate a number of city groups to encourage collaboration on meeting the City's Decarbonisation goals - these will include large employers, the Chambers, SETU, Retailers	This is an engagement related action and will not have a real environmental effect when considered in isolation. It will support the delivery of the plan vision and objectives generally. This action will ensure an integrated approach toward climate adaptation is taken and is likely to result in better climate adaptation outcomes and positive environmental effects, including positive effects on the water environment.	0	0	0	0	0	0	0	0	0	0	0
DZ 1.2	Corodinate Climate Action with Kilkenny County Council in relation to Ferrybank	This collaborative action will support the reduction of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	0
DZ 1.3	Develop a Carbon Neutral Community programme where we establish an energy cooperative in a pilot community and deliver renewable energy and energy efficiency solutions for homes and transport	Development supported by this action, such as renewable energy or active travel related development could potentially have negative environmental effects, including impacts on water quality or hydrology, biodiversity and protected sites.	0	0	0	0	0	0	0	0	0	0	0
DZ 1.4	Work on an area by area basis (City Centre, Ballybricken, Carrickpherish, Poleberry etc.) over a number of months to have a presence in the community to provide advice to the public and businesses while also delivering projects in Active Travel, Presentation, Roads, Climate Adaptation, Housing etc. To provide information on existing services and to collaborate with the community going forward to develop projects and source	Development supported by this action, such as renewable energy or active travel related development could potentially have negative environmental effects, including impacts on water quality or hydrology, biodiversity and protected sites.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	financing/funding. Breaking the Decarbonisation Zone plan down to manageable community actions												
DZ 2.1	Sustainable Urban Drainage systems to be incorporated in street upgrades, Council building projects and private developments.	<p>Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.</p> <p>Drainage related development supported by this action could lead to unforeseen and unintended environmental effects in the absence of appropriate mitigation, including impacts on water quality or hydrology, biodiversity and protected sites.</p>	0	0	0	0	0	0	0	0	0	0	0
DZ 2.2	Deliver a Rain Gardens project- provide the public with information on how to is done	This action will facilitate a broader understanding of SuDS. The action is promotional in nature and will not a real discernible environmental effect in and of itself. Such promotional action will underpin and broadly support the effective delivery of community level SuDS and nature based solutions however. The adoption of this action can potentially lead to some positive environmental effects on water quality, hydrology and biodiversity, flora and fauna.	0	+	0	0	0	0	0	+	0	0	+
DZ 2.3	Work with 4 regions in the city (e.g., Ballybricken, Carrickpherish) to co-design with the community climate adaptation interventions - planting, SUDS, green roofs rainwater harvesting etc.	<p>Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SuDS as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>In the absence of any mitigation, such development could potentially have a variety of negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on</p>	0	0	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		aquatic eco-systems; the receiving air environment (due to the generation of construction dust), and the receiving human environment.											
DZ 2.4	Increase tree-canopy cover to 20.9% uniformly across the city. A particular focus will be on areas of the city with limited tree coverage at present, areas that are likely to get uncomfortable warm due to the Urban Heat Island effect.	This action will have potential to have positive effects on biodiversity, and on air and water quality. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	0	0	0	0	0	0	0	0	0	0	+
DZ 2.5	Work with the Presentation team to identify new methods of planting that take into account periods of drought - a particular focus on hanging baskets	This is an engagement related action and will have potential to have positive effects on biodiversity, and on air and water quality. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	0	0	0	0	0	0	+	0	0	0	0
DZ 2.6	Put in place a park of regional significance as per County Development Plan incorporating Nature Based Solutions to reduce flood likelihood	<p>This action will have potential to have positive effects on biodiversity, and on air and water quality. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions. The action will also create positive effects for population and human health and will promote tourism and recreation.</p> <p>Flood resilience action has the potential to have positive environmental effects also. The possible development of nature-based solutions and SuDS as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>In the absence of any mitigation, such development could potentially have a variety of significant,</p>	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), and the receiving human environment. The development of amenity parkland may create unintended traffic and transport impacts also.											
DZ 2.7	Climate Adaptation measures to be incorporated into all Council developments going forward - larger downpipes, SuDS, Nature Based Solutions	<p>Flood resilience action has the potential to have positive environmental effects also. The possible development of nature-based solutions and SuDS as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>The delivery of flood resilience action also has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including ecological receptors.</p> <p>The progression of climate adaption related action has the potential to lead to significant development taking place at and in the vicinity of water bodies.</p> <p>In the absence of any mitigation, development supported by this action could potentially have a variety of negative environmental effects, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), and the receiving human environment.</p>	0	0	0	0	0	0	0	0	0	0	0
DZ 2.8	Implementing permeable surfaces (bioswales / rainbeds / pervious pavement) - requirement in new developments	Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SuDS as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.	0	0	0	0	0	0	+	0	+	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		In the absence of any mitigation, such development could potentially have a variety of negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), and the receiving human environment.											
DZ 2.9	Create a community competition for Parklets - areas that can be extended into a parking space that are planted or are rest areas	This promotional/engagement related action will underpin and support the effective delivery of climate action in the local community by promoting awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	+	0	0	+	0	0	0	+	0	0	0
DZ 2.10	Plant 100,000 native trees within the Metropolitan area	This action has the potential to have light to moderate significant effects on local biodiversity, and slight effects on landscape character and visual amenity. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	0	0	0	0	0	0	+	0	0	0	+
DE 2.11	Carbon sequestration through detailed tree / meadow planting / growing, rewilding, soil management, waterways and wetland planning, informed by habitat mapping, opportunity mapping and tree canopy surveys	<p>This action will promote the protection and enhancement of trees and hedgerows and has the potential to generate slight to significant effects on biodiversity in the county. The enhancement of trees and hedgerows and the promotion of proper mowing regimes may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.</p> <p>This action has the potential to negatively affect biodiversity if misguided or inappropriate regimes are adopted.</p>	+/-	+/-	0	+	+	0	-	+/-	0	0	0
DZ 2.12	Reduce use of fertilizers by increased use of locally produced compost and local allotment growing	Promoting the reduced use of fertiliser in the community will likely prevent to some degree the occurrence of environmental pollution incidents.	+	+/-	0	0	+	0	-	+/-	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 2.13	Habitat mapping and biodiversity opportunity mapping to understand development opportunities and future habitat options for the open space network outlined in open and green space plans	This is a study related action that will have no real environmental effect when considered in isolation. This action has the potential to have slight positive effects on biodiversity, water and air quality.	+	+/-	0	0	+	0	-	+/-	0	0	0
DZ 2.14	Increase shade in public spaces (vegetation, retractable roofs, tensile structures, etc.)	This action has the potential to have light to moderate significant effects on local biodiversity, and slight effects on landscape character and visual amenity. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	+/-	+/-	0	+	0	0	-	+/-	0	0	+
DZ 3.1	Develop a nature corridor across the city - encouraging householders to use their gardens to facilitate wildlife	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality and biodiversity. This action is unlikely to lead to the carrying out of works or development that may have a significant environmental effect.	0	0	0	0	0	0	0	0	0	0	0
DZ 3.2	Incorporate practices as recommended by the National Pollinator Plan in city parks management	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality, biodiversity, and landscape and visual amenity.	0	0	0	0	0	0	0	0	0	0	0
DZ 3.3	Whips and Wildflower planting/management in Williamstown Golf Course	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration. It also has the potential to lead to positive effects on local air quality, biodiversity, and landscape and visual amenity.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 4.1	Complete a drone study of all suitable roof space for solar PV	This is a study related action that will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
DZ 4.2	Deliver a 50% energy efficiency improvement in Council owned buildings	<p>This action will support the reduction/offset of the LAs organisational GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action has the potential to support the development of renewable energy systems at public buildings that could have a variety of slight to potentially significant negative environmental effects, including visual impacts and impact on buildings that are designated as protected structures.</p> <p>There is the potential air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.</p>	0	0	0	0	0	0	+	0	0	0	0
DZ 4.3	Equip existing non-residential buildings with a building automation and control system before 31 December 2024 where the effective rated output for heating, ventilation and air-conditioning systems is over a threshold of 290kW	<p>This action will promote organisational energy efficiency within the local authority organisation.</p> <p>This action has the potential to support organisational GHG emission reductions. The action is not likely to have an adverse environmental effect.</p>	0	0	0	0	0	0	0	0	0	0	0
DZ 4.4	Work with partners to deliver a District Heating Scheme for Waterford City	This is a study-related action and will have no real environmental effect when considered in isolation. Depending on the outcome of this study, it has the potential to support the delivery of GHG emission reductions and energy efficiency in a local area.	-	-	0	0	0	0	+/-	-	0	0	+/-

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		In the absence of any mitigation, development that this action could lead to, which will include extensive pipe laying works, could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, flora and fauna; the receiving air environment (due to the generation of construction dust), the receiving noise environment (due to the generation of construction phase noise), and the receiving human environment.											
DZ 4.5	Ensure any new developments along any future District Heating route are District Heating compatible at the planning stage	Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	+
DZ 4.6	Upgrade of public buildings to BER B	This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for light and air pollution during retrofitting works. There is the potential air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement-based products during construction) and biodiversity impacts.	-	0	0	-	0	0	+	0	0	0	0
DZ 4.7	Do a review of Council owned land in the city for solar suitability. Develop solar energy projects. Study to be done in conjunction with SETU	This is an action that serves to promote the development renewable energy projects. In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality, and biodiversity, including flora and fauna reliant on aquatic eco-systems.	-	0	0	-	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 4.8	Deploy solar energy on all Council buildings with a floor area of greater than 250m2	<p>This action will support the reduction/offset of the LAs organisational GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action has the potential to support the development of renewable energy systems at public buildings that could have a variety of slight to potentially significant negative environmental effects, including visual impacts and impact on buildings that are designated as protected structures.</p> <p>There is the potential air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.</p>	-	-	0	0	0	0	+/-	-	0	0	+
DZ 4.9	Replace inefficient streetlights with LEDs	<p>This action will support the local authority in reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect in terms of GHG emissions. However, the spectrum of light from LED sources has the potential to impact nocturnal species. Therefore, there is also scope for there to be slight negative effects if unmitigated.</p>	0	0	0	0	0	0	0	0	0	0	0
DZ 4.10	Development of a Smart City District on O Connell Street and the Quays (centralised at the Munster Express Building) that will use sensors to maximise energy production, efficient energy use, report risk of drain flooding and communicate air quality impacts	<p>This action has the potential to have positive effects to both climate sector and water quality.</p> <p>This action may support development in the LA to facilitate monitoring and maximise energy production.</p>	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		This action may support some degree of development which could potentially result in negative environmental effects. There is the potential air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement-based products during construction) and biodiversity impacts.											
DZ 4.11	All new homes are constructed to a BER rating standard of A2 - A3	This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	+	0	0	0	0	0	0	0
DZ 4.12	Through the Croí Conaithe scheme bring existing buildings up to a high energy efficient standard ensuring occupancy rates are high in our city centre	<p>This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings. Such works could have on the conservation status of protected structures or the context in which they sit.</p>	0	-	0	-	0	0	0	0	0	0	0
DZ 4.13	Removal of fossil fuel heating from all Council buildings	<p>This action has the potential to lead to positive effects on the climate sector and result in the offset of organizational GHG emissions.</p> <p>There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.</p>	0	-	0	-	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		Such works could have on the conservation status of protected structures or the context in which they sit.											
DZ 4.14	In conjunction with the Local Enterprise Office compile a strategy for developing the Geothermal Industry in Waterford City Along with conducting a feasibility study for the city based on GSI recommendations	The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. Renewable energy development supported by this action could potentially have unintentional negative environmental effects.	0	0	0	0	0	0	0	0	0	0	0
DZ 4.15	Investigate the potential for and funding sources to develop our approach to affordable net zero energy retrofits by city district e.g., Ballybricken, Ardkeen, Carrickpherish	This is a finance related action that can support retrofitting aimed at improving BER ratings. The adoption of this action can potentially underpin reduced energy consumption and prevent GHG emissions.	0	0	0	0	0	0	0	0	0	0	0
DZ 4.16	Update Renewable Energy Strategy, within City and County Development Plan	This action has the potential to support the development of renewable energy infrastructure that could have a variety of slight to potentially significant negative environmental effects, including visual impacts, noise impacts, biodiversity impacts and impact on buildings that are designated as protected structures. There is the potential air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.	0	0	0	0	0	0	+	0	0	0	0
DZ 4.17	Continue to support the general public on fuel poverty abatement schemes and assist in accessing such funded schemes such as the "Warmer Homes Scheme".	This is a finance related action that can support retrofitting aimed at improving BER ratings. The adoption of this action can potentially underpin reduced energy consumption and prevent GHG emissions.	0	0	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 4.18	North Quays to be an exemplary example of sustainable energy technologies	<p>The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>Renewable energy development supported by this action could potentially have unintentional negative environmental effects.</p>	0	0	0	0	0	0	0	0	0	0	0
DZ 4.19	Develop a "Hydrogen Energy Strategy" for Waterford City and resource implementation of aspects of the National Strategy that can be advanced in Waterford	<p>The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>Sustainable energy development supported by this action could potentially have unintentional negative environmental effects.</p>	0	-	0	0	0	0	-	-	0	0	+
DZ 4.20	Exploit Waterford's Shallow Geothermal opportunities by including Geothermal as a heat source for a District Heating and by including Geothermal heating where suitable in Council redevelopment projects	<p>The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>Renewable energy development supported by this action could potentially have unintentional negative environmental effects.</p>	0	0	0	0	0	0	+	0	0	0	0
DZ 4.21	Develop Solar Car port projects (1MW) and a solar farm within the city (19MW)	<p>The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>Renewable energy development supported by this action could potentially have unintentional negative environmental effects.</p>	0	?	0	0	?	?	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 4.22	Investigate the requirements for large scale installation of low carbon sources of heating (air/ground/water source heat pumps), using council owned homes as a test bed in partnership with grid operators and supply chains	<p>This action will support the retrofitting of council owned homes. The adoption of this action can potentially result in reduced GHG emissions. The action is likely to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>There is the potential for light and air pollution during retrofitting works. There is also potential for impacts on the receiving soils or water environment.</p>	0	0	0	0	0	0	0	0	0	0	+
DZ 5.1	Through the libraries and Family Resource Centres run an Energy Poverty campaign informing households of their options for home upgrades	This engagement/ educational action will support the retrofitting of homes within the LA. The adoption of this action can potentially result in reduced GHG emissions. The action is likely to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	0
DZ 5.2	Host monthly Climate Cafes in different parts of the city where the community can get advice on sustainability in their areas	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	0	-	0	-	-	0	-	-	+	0	+
DZ 5.3	Hold an annual schools Climate Conference for City Secondary Schools	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	0	?	0	0	?	?	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 5.4	Develop a Carbon Neutral Waterford brand that can be used for signage for any emissions reducing projects. Signage would use QR codes to connect to an online record of projects in the public, community and private sector.	This promotional/educational action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	+	-	0	-	0	0	+	-	+/-	0	0
DZ 5.5	Focussed road safety campaign particularly focussed on parking of footpaths and cycle lanes near schools	This action has the potential to encourage active travel, reducing the number of ICE vehicles on the road and GHG emissions related to transport.	0	+	0	0	0	0	0	+	0	0	0
DZ 5.6	Work with Waterford Walls and other arts campaigns to use art to facilitate Climate Action	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues.	0	+	0	0	0	0	0	+	0	0	0
DZ 5.7	Create and deliver the Commerce for a Carbon Neutral Waterford scheme where businesses can play their part in reducing emissions in Waterford City	The action has the potential to provide access to climate action initiatives to all within the community - which could lead to a positive impact on the climate environment and a general lowering of GHG emissions in the LA Region.	0	+	0	0	0	0	0	+	0	0	0
DZ 5.8	Continue to engage with businesses encouraging them to save energy with the Commercial Energy Rates Discount Scheme	<p>The action has the potential to encourage climate action to business within the LA region, which could lead to a positive impact on the climate environment and a general lowering of GHG emissions.</p> <p>This action has the potential to support the building retrofits in the LA region that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts.</p>	0	-	0	+/-	0	0	0	0	0	0	0
DZ 5.9	Reward scheme for pro environmental behaviours – Gamify action in conjunction with Waterford businesses/ museums/	Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 6.1	Investigate the possibility of creating a Green Bond for the city which can be used to invest in renewable energy	The action has the potential to support GHG emission reductions in the city. Renewable energy development supported by this action could potentially have unintentional negative environmental effects.	0	-	0	-	0	0	+	-	+/-	0	0
DZ 6.2	Whole life cycle costing of energy in Council redevelopment or building projects	Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	+	0	0	0	0	0	+	0	0	0	+
DZ 7.1	Complete a study of BERs across all social housing	This is a study-related action and will have no real environmental effect when considered in isolation. Depending on the outcome of this study, it has the potential to support the delivery of Residential sector GHG emission reductions and energy efficiency in the DZ.	+	-	0	0	0	0	+/-	-	0	0	+
DZ 7.2	Education campaign for how energy efficient properties operate - videos and guides	This promotional/educational action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	-	0	0	0	0	+/-	-	0	0	0
DZ 7.3	Develop financial instruments that will allow for the acceleration of social housing retrofits resulting in the upgrade of 1,200 homes (55% of the estimated homes below a BER of C) in the city to BER B2 or higher	This action will support the local authority in reducing its GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.	+	-	0	0	0	0	+/-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 7.4	Whole life cycle costing of energy in Council redevelopment or building projects	Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	+	0	0	0	0	0	+	0	0	0	+
DZ 8.1	15% of the area of all new sites being set aside for nature - planning condition	This action has the potential to have light to moderate significant effects on local biodiversity, and slight effects on landscape character and visual amenity. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	+	0	0	0	0	0	+	0	0	0	+
DZ 8.2	Integration of renewable energy, EV charging, active travel infrastructure into new developments	<p>The delivery of good network of charging infrastructure has the potential to promote the use of sustainable travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>The expansion of the EV charging network will lead to the development of multiple charging points and ancillary electrical infrastructure including grid connection routes.</p> <p>In the absence of any mitigation, works involved in the construction of development supported by this action such as additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), material asset impacts, and biodiversity impacts.</p>	0	-	0	0	0	0	+/-	-	-	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 8.3	In URDF projects facilitate a city centre cooperative community with a collective skill set that can tackle renovation projects from within its own resources. This work should have a focus on Circular Economy, making tools and skills available for people to do up properties that they can live in	The action has the potential to provide access to climate action initiatives to all within the community - which could lead to a positive impact on the climate environment and a general lowering of GHG emissions in the LA Region. This action has the potential to support building retrofits in the LA region that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts.	0	-	0	0	0	0	-	0	0	0	+
DZ 8.4	Incorporate water conservation in all new developments	Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment, water quality and biodiversity.	0	0	0	0	0	0	0	0	+	0	0
DZ 8.5	Work with communities to incorporate rainwater harvesting into projects	The development of this nature-based solution has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.	0	0	0	0	0	0	0	0	+	0	+
DZ 9.1	Put in place a bike library for citizens to trial bikes	The development of this plan will support active travel and may lead to reduced internal combustion engine-based vehicle use and associated GHG emissions and local air quality impacts.	0	0	0	0	0	0	+	0	0	0	+
DZ 9.2	Set up a Zero Waste Waterford Campaign to coincide with the changing Waste Management Law. The campaign will work with businesses to reduce paper waste, single use plastics, disposable cup waste etc.	This action will create minor positive effects including reducing paper use and waste generation. It will also have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	+
DZ 9.3	Borrow boxes for sport equipment	This action has the potential to reduce waste in the LA region having slight positive environmental effects.	-	+/-	-	0	0	0	+/-	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 9.4	Investigate the possibility of creating a Repair Hub in the city centre	This action will create minor positive effects including reducing paper use and waste generation. It will also have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	+/-	0	0	0	0	+	0	0	0	+
DZ 9.5	Continue to facilitate the "Libraries of things" in city libraries.	This action will create minor positive effects including reducing paper use and waste generation. It will also have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	+	0	0	0	0	0	0	0	0	0
DZ 9.6	Through the libraries host repair and swap events each year	This action will create minor positive effects including reducing paper use and waste generation. It will also have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	+	0	0	+	0	0	+	0	0	0
DZ 9.7	Use public spaces for repair pop ups across the year	This action will create minor positive effects including reducing paper use and waste generation. It will also have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	+/-	+	0	0	0	+	0	0	0	+
DZ 10.1	Completion of the Sustainable Transport Bridge between Ferrybank and Waterford City	This action supports the use of sustainable means of transport and has the potential to reduce the use of private cars and GHG emissions related to transport. The development of the bridge may have a wide variety of unintended negative environmental impacts in the absence of proper design and environmental mitigation, such as landscape and visual impacts, biodiversity related impacts, hydrological and water quality related impacts, and traffic and transport related impacts.	0	+	-	0	0	0	-	+/-	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 10.2	Enable cyclist priority on traffic lights in the city that have that feature and incorporate that feature when traffic lights need to be replaced	This action has the potential to increase the use of active transport and reduce the use of private cars. This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.	0	+	0	0	0	0	0	+	0	0	+
DZ 10.3	Install 33.9 Km of cycle lanes	<p>This action supports the development of infrastructure for active travel. This action has the potential to encourage the use of active travel, reducing the use of ICE vehicles and reducing GHG emissions related to transport.</p> <p>In the absence of mitigation, the action could support the carrying out of potentially significant development which could have negative slight to significant environmental effects, including biodiversity impacts, and impacts on the water or soils environment (due to development construction phase run-off of silt or cement based material). Such potential effects can be mitigated by considering planning and environmental related matters and constraints early on during the assessment/design process.</p>	0	+	0	0	0	0	0	+	0	0	0
DZ 10.4	Review public parking and staff parking to see the impact of car pooling, car sharing, public transport and active travel to identify areas where different usages could be applied for those spaces	<p>This is a study based action that has the potential to support and underpin active travel development.</p> <p>This action has the indirect potential to encourage modal shift and the use of active travel networks and public transport. This action may lead to the development of additional cycling and walkway infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of additional active infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.</p>	0	-	0	0	-	0	+/-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 10.5	Deliver a cycle parking initiative with large employers in the city	<p>This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.</p> <p>This action has the potential to encourage modal shift and the use of active travel networks and public transport. The minor works involved in the development of additional cycling parking are unlikely to have a significant environmental effect.</p>	0	0	0	0	0	0	0	0	0	0	+
DZ 10.6	Install 3 Km of upgraded footpaths along with maintaining existing footpaths	<p>This action supports the development of infrastructure for active travel. This action has the potential to encourage the use of active travel, reducing the use of ICE vehicles and reducing GHG emissions related to transport.</p> <p>In the absence of mitigation, the action could support the carrying out of potentially significant development which could have negative slight to significant environmental effects, including biodiversity impacts, and impacts on the water or soils environment (due to development construction phase run-off of silt or cement based material). Such potential effects can be mitigated by considering planning and environmental related matters and constraints early on during the assessment/design process.</p>	-	-	0	0	-	0	+/-	-	0	0	+
DZ 10.7	Work with the City's large employers on achieving the Smarter Travel Mark and participate in the Mark as a Council	This engagement related action has the potential to support modal shift and lead to GHG emission reductions and local air quality improvements.	0	0	0	0	0	0	+	0	0	+	0
DZ 10.8	Develop a Mobility as A Service platform in partnership with public transport operators and service providers of shared transport solutions such as car clubs and bike hire	This action will promote the use of public transport networks and better encourage modal shift away from ICE based vehicles - leading to positive effects on climate and local air quality.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 10.9	Work with postal and delivery companies to set up a "Last Mile Delivery" trial in Waterford	This action has the potential to reduce use of ICE vehicles to make deliveries, reducing GHG emissions related to commerce.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.10	Maintain and promote the public bike scheme - liaise with the NTA on the extension of the scheme	This action supports the use of active travel over ICE vehicles and has the potential to reduce GHG emissions related to transport.	0	+	0	0	0	0	0	0	0	0	+
DZ 10.11	Install bike repair stands in busy cycling locations	This action supports the use of active travel over ICE vehicles and has the potential to reduce GHG emissions related to transport.	0	0	0	0	+	0	+	0	0	0	0
DZ 10.12	Increase the number of Council staff walking, cycling, taking public transport and car pooling in the city to 60%	This action also has the potential to generate some degree of positive environmental effect due to a reduction in private vehicle use. This action encourages the use of public transport and active travel routes.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.13	Adjust Council staff parking policy to encourage staff to travel actively, use public transport, car pool and use pool bikes where possible	This action supports the use of active travel and public transport and has the potential to reduce the use of private cars and GHG emissions related to transport.	0	0	0	0	0	0	0	-	0	0	0
DZ 10.14	Complete an EV charging strategy and apply for the Neighbourhood Charging Fund for the required number of chargers and ensure that all new plannings for developments include the legally mandated EV charger requirement	This action will support the local authority in reducing its transport sector GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality. This action could also lead to the delivery of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the DZ. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust),	0	0	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.											
DZ 10.15	Deliver at least 5 Safe Routes to Schools campaigns at City Schools - this will depend on school demand	<p>This action has the potential to encourage modal shift and the use of active travel networks and public transport. This action supports the development of additional cycling and walkway infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.</p> <p>This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.</p>	0	0	0	0	0	0	+	-	0	0	0
DZ 10.16	Air pollution monitoring programme at City Schools with education programme	This is a monitoring and engagement related action and will have no real environmental effect when considered in isolation. It will support the delivery of the plan vision and objectives generally.	0	0	0	0	0	0	+	0	0	0	+
DZ 10.17	Review of bus lanes in the city and extension as part of the Bus Connects programme	<p>This action supports the use of active travel and public transport and has the potential to reduce the use of private cars and GHG emissions related to transport.</p> <p>Such a review may lead to alteration to existing traffic and transport related infrastructure, which could lead to unintended negative effects on traffic conditions.</p>	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 10.18	Deliver a car pooling app for the city and a campaign to encourage individuals to car pool - this will be done in conjunction with the large employers in the city	This action supports the use of sustainable means of transport and has the potential to reduce the use of private cars and GHG emissions related to transport.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.19	Car pool parking to be identified and marked out within car parks - citizens who car pool will have access to the best car park spaces and parking attendants will be able to verify car pooling.	This action supports the use of sustainable means of transport and has the potential to reduce the use of private cars and GHG emissions related to transport.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.20	Review of parking policy to reflect the benefit of people car pooling	This action supports the use of sustainable means of transport and has the potential to reduce the use of private cars and GHG emissions related to transport.	0	0	0	0	0	0	0	0	+	0	0
DZ10.21	Zero emissions vehicles will be used in for Council work in the city	This action will support the local authority in reducing its transport sector GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.22	Reduce speed limit to 30kph in the Metropolitan Area as specified in the Metropolitan Area Transport Strategy	This action has the potential to encourage the use of active travel within the metropolitan area, reducing the use of ICE vehicles and GHG emissions.	0	0	0	0	0	0	0	0	0	0	+
DZ 10.23	Investigate Low Emission Zones in the City Centre and Demand Management	The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	+
DZ 10.24	Run an anti-idling campaign at all primary schools in the city, educating the public on how bad air quality is for children	This action has the potential to reduce littering and local air quality impacts.	0	0	0	0	0	0	+	0	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ 10.25	Put in place transport hubs where citizens can rent a bike, car or scooter.	This action has the potential to reduce the use of private cars and therefore GHG emissions related to transport.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.26	Promotion of Playful City Guidance amongst communities that apply for funding for community events. Streets closed off to encourage cycling and walking to be considered as part of the funding requirement for small community festivals	This action has the potential to encourage the use of active travel within the LA area, reducing the use of ICE vehicles and GHG emissions.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.27	City Centre involvement in European Car Free Day and Clean Air Day (Certain streets closed to traffic and events)	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	+	0	0
DZ 10.28	Delivery of Park and Ride -	This action has the potential to encourage modal shift and the use of active travel modes. It will help fully realise the potential positive environmental effects associated with sustainable/active travel. The delivery of such infrastructure may lead to unintended environmental impacts, including dust, noise, water quality and traffic impacts, in the absence of good design or appropriate mitigation.	0	0	0	0	0	0	0	0	0	0	0
DZ 10.29	Restriction of traffic of a certain axle through the city - extension of 5 axle ban to anything above 4 axles	The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. This action can lead to improved traffic and transport conditions and local air quality improvements.	0	0	0	0	0	0	0	0	+	0	0

DZ 10.30	Continue to work with the NTA to provide infrastructure for the bus network - the city bus network will be electrified and extended within this period with input from the Council	<p>This action will promote the use of public transport networks and better encourage modal shift away from ICE based vehicles - leading to positive effects on climate and local air quality. The minor works involved in developing bus stops and bus shelters are unlikely to lead to any significant environmental impact.</p> <p>The action may support the development of transport infrastructure, including infrastructure to facilitate the electrification of the bus network, such as cable routes or sub-station infrastructure.</p>	0	0	0	0	0	0	0	-	0	0	0
DZ 10.31	Facilitate a bike delivery trial in the city	This action has the potential to encourage the use of active travel within the LA area, reducing the use of ICE vehicles and GHG emissions.	0	0	0	0	0	0	0	+	0	0	0

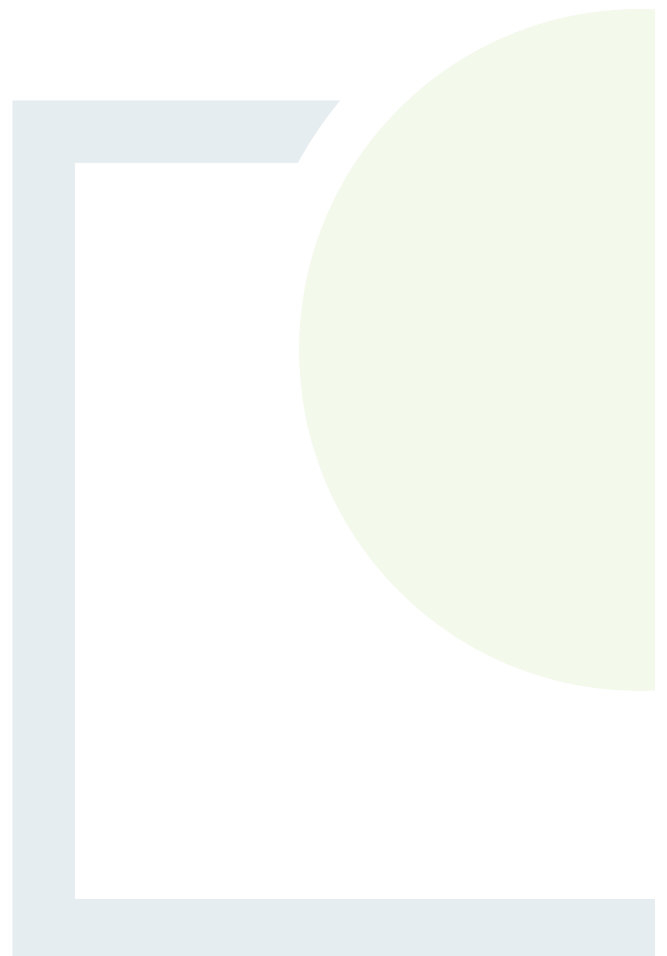
Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape, Seascape & Visual Amenity. CH - Cultural Heritage - Archaeology & Architectural. S - Soils. LU - Land Use. AQN - Air Quality and Noise. W - Water. MA - Material Assets. TR- Tourism & Recreation. CC - Climate Change.



CONSULTANTS IN ENGINEERING,
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& PLANNING

APPENDIX 4

SEA Screening
Report for Plan
Modifications





CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE &
PLANNING

STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING REPORT

SEA Screening Report For Modifications To
The Waterford County Council Local
Authority Climate Action Plan 2024 - 2029

Prepared for:
Waterford County Council



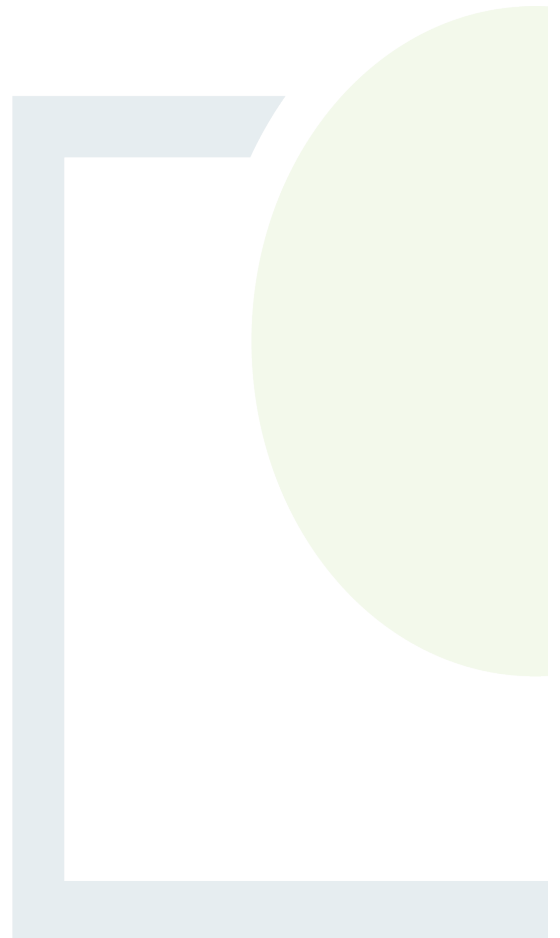
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SEA Screening Report For Modifications To The Waterford County Council Local Authority Climate Action Plan 2024 -2029

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

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Client: Waterford County Council

Keywords: Strategic Environmental Assessment, SEA, Environmental Report, Local Authority Climate Action Plan, LACAP.

Abstract: Fehily Timoney and Company is pleased to submit this SEA Screening Report for Modifications to the Waterford County Council Local Authority Climate Action 2024 - 2029 to Waterford County Council.

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1. INTRODUCTION

1.1 Background

This is the Strategic Environmental Assessment (SEA) Screening Report for Modifications to the Waterford County Council (WCC) Local Authority Climate Action Plan (referred to as either the 'LACAP' or the 'Plan') 2024 - 2029.

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 sets out the provisions governing the establishment and operation of a LACAP. The broad purpose of a LACAP will be to define adaptation and mitigation measures at local level to support the reduction of Greenhouse Gas (GHG) emissions within a local authority as an organization and throughout the local community. LACAPs shall be implemented over a five-year period.

1.2 SEA Process to Date

A draft version of the LACAP was prepared. This document was accompanied by a Draft SEA Environmental Report which considered, evaluated and presented the environmental effects of the Draft LACAP on the environmental baseline and presented mitigation measures to avoid or minimize identified environmental effects. This SEA process was carried out in accordance with the requirements of the SEA Directive¹ and transposing national legislation.

Appropriate Assessment (AA) was also undertaken on the Draft LACAP in accordance with the Habitats Directive² and transposing national legislation. A Draft Natura Impact Report (NIR) which considered the effects of the Draft LACAP on European sites was therefore prepared also. This report suitably informed the SEA process.

A period of consultation has been undertaken in relation to the Draft LACAP, the Draft SEA Environmental Report and the Draft NIR. Statutory environmental authorities, interested stakeholders and members of the public were invited to make submissions in connection with the Draft LACAP and the associated Draft SEA Environmental Report and Draft NIR.

All submissions made on this documentation have been reviewed by WCC. These submissions were taken into consideration prior to finalisation of the LACAP. WCC have prepared a Chief Executive Report on the submissions received. This document details the submissions received, WCC responses to the submissions, and Plan Action Modifications arising following consideration of the submissions.

1.3 Purpose of this Assessment

An SEA Screening Assessment must be carried out on all modifications made to the Draft LACAP Actions arising following consideration of submissions. The purpose of this assessment is to identify whether the Plan Action modifications will result in additional, likely, significant environmental effects not previously considered in the SEA process to date, and to inform whether or not a full SEA is required on the Plan Action modifications. This SEA Screening Assessment considers changes to the binding 'Actions' defined within the Plan.

¹ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

² Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.



This report documents the SEA Screening undertaken to identify the need for full SEA in this case. This report will accompany the documented Plan Action modifications.

This report should be read in conjunction with the following documents:

1. The Waterford County Council LACAP 2024 - 2029.
2. The Draft SEA Environmental Report for the Waterford County Council LACAP 2024 - 2029.
3. The Draft NIR for the Waterford County Council LACAP 2024 - 2029.
4. Waterford County Council LACAP Chief Executive Report.
5. The AA Screening Report for modifications to Waterford County Council LACAP 2024 - 2029.

1.4 Draft SEA Environmental Report

A Draft SEA Environmental Report has been produced for the Draft LACAP. This report contains the information specified in Annex 1 of the SEA Directive and Schedule 2 and 2B of S.I. 435 and 436 of 2004. A checklist of information included in this SEA Environmental Report under the SEA Directive and transposing national legislation is provided in Table 1-1. This checklist cross-references the sections in the report where information can be found.

The information contained in this Draft SEA Environmental Report has been referred to during the carrying out of the SEA Screening Assessment documented in this report.

Table 1-1: SEA Environmental Report Checklist

Information Required	Relevant Section of the SEA Environmental Report
An outline of the contents and main objectives of the plan and relationship with other relevant plans.	Section 2.
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan.	Section 4.
The environmental characteristics of areas likely to be significantly affected.	Section 4.
Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive.	Section 4.
The environmental protection objectives, established at international, European Union or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation.	Section 5.
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Section 7 and Appendix 3.



Information Required	Relevant Section of the SEA Environmental Report
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan.	Section 8.
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Section 6.
A description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan.	Section 9.
A non-technical summary of the information provided under the above headings.	Front Section
Interrelationships between each Environmental Component.	Section 7 and Appendix 3.



2. SEA SCREENING METHODOLOGY

2.1 Overview of the SEA Process

The SEA Directive – Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment, requires that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

The overarching objective of the SEA Directive is *'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans....with a view to promoting sustainable development'*³

SEA is a process for evaluating, at the earliest appropriate stage, the environmental consequences of implementing Plan or Programme (P/P) initiatives prepared by authorities at a national, regional or local level or which have been prepared for adoption through legislative means.

SEA is described within the Department of the Environment, Community and Local Government's (2004) Guidelines for Regional Authorities and Planning Authorities on the Implementation of SEA Directive (2001/42/EC) as the *'formal systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt the plan or programme'*.

The SEA process comprises the following steps:

- Screening – the process whereby a decision is made on whether a particular P/P (or Plan Action modifications in this case), other than those for which SEA is mandatory, would be likely to have significant environmental effects, and would require SEA.

If SEA is required following the Screening Determination, the following steps are necessary:

- Scoping – Scope and level of detail in the environmental assessment is decided upon, in consultation with the identified statutory bodies;
- Environmental Assessment - An assessment of the likely significant impacts on the environment as a result of the relevant P/P;
- Preparation of an Environmental Report;
- Consultation of the P/P and associated Environmental Report;
- Evaluation of the submission and observations made on the P/P and environmental report; and
- Provision of an SEA Statement, identifying how environmental considerations and consultation have been integrated into the Final P/P.

SEA is intended to provide the framework for influencing decision-making at an earlier stage when P/Ps – which give rise to individual projects – are being developed. It is noted that SEA should result in more sustainable development through the systematic appraisal of policy options.

³ Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities (Department of the Environment, Community and Local Government, 2004)



2.2 Overview of the SEA Screening Process

The first step of the SEA process is to carry out SEA Screening to determine the requirement for SEA of a P/P (or Plan Action modifications in this case).

The first stage in determining whether a P/P requires SEA is the carrying out of a 'Pre-screening Check' (also known as a 'Stage 1 Applicability'). This allows rapid screening-out of P/P that are clearly not going to have any environmental impact and screening-in of those that do require SEA. The second stage in determining whether a P/P requires SEA is known as 'Stage 2 Screening.' The purpose of this stage is to determine whether a P/P is likely to have significant effects on the environment and whether SEA must be carried out in conjunction with a P/P. The application of environmental significance criteria is important in determining whether an SEA is required. Annex II of Directive 2001/42/EC sets out the 'statutory' criteria that should be addressed when undertaking this stage. This process is typically undertaken following an 8-step approach Figure 2-1.

The first environmental significance criterion relates to the characteristics of the P/P, having regard to: the degree to which the P/P sets out a framework for other projects and activities; the influence of the P/P on other projects, plans or activities; the role of the plan for integrating environmental considerations to promote sustainable development; environmental issues of relevance to the P/P and the relevance of the P/P for the implementation of EU legislation on the environment.

The second environmental significance criterion refers to the characteristics of the effects and area likely to be affected, having regard to; the probability, duration, frequency and reversibility of the effects; the cumulative nature of the effects; the transboundary nature of the effects; the value and vulnerability of the area likely to be affected due to special natural characteristics or cultural heritage, exceeded environmental quality standards or limit values or intensive use; the effects on areas or landscapes which have a recognised national, European or international protection status.



Figure 2-1: SEA Screening steps as per the EPAs Good Practice Guidance on SEA Screening



2.3 Legislative Context

The screening stage of SEA is primarily addressed through Article 2 and Article 3 of the SEA Directive and Annex II which sets out the considerations in relation to determining significant environmental effects.

Article 2(a) of the SEA Directive establishes two cumulative conditions which P/P must satisfy in order for the further elements of the SEA Directive to be applicable to them:

- They must have been prepared and/or adopted by an authority at national, regional or local level or prepared by an authority for adoption, through a legislative procedure, by a parliament or government; and
- They must be required by legislative, regulatory or administrative provisions.

If these conditions are not satisfied, the measure is not regarded as a P/P which comes within the scope of the SEA Directive.

Once a P/P has been determined to be within the scope of the SEA Directive, Article 3 sets out the criteria for determining which P/P require environmental assessment. Again, several conditions must be met. A P/P must (a) belong to the list of sectors and (b) set the framework for future development consent of projects listed in Annexes I and II to the EIA Directive, or (c) require an Appropriate Assessment under the EU Habitats Directive (92/43/EEC).

Annex II of the SEA Directive presents the criteria for determining the likely significant effects referred to in Article 3(5) of the Directive. The significance of effects is determined with reference to the type and nature of the P/P, its position in the planning hierarchy and its influence on other P/P. It also has regard to the nature of the effects and the sensitivity of the receiving environment as well as the magnitude and spatial extent of the effects. Cumulative and transboundary issues must also be considered.

The SEA Directive is transposed into Irish legislation by the following:

- European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations (S.I. 435/2004)
- Planning and Development (Strategic Environmental Assessment) Regulations (S.I. 436/2004). Both pieces of legislation were amended in 2011 through the following amendment regulations:
- European Communities (Environmental Assessment of Certain Plans and Programmes) Amendment Regulations (S.I. 200/2011)
- Planning and Development (Strategic Environmental Assessment) Amendment Regulations (S.I. 01/2011).

The criteria defined in Annex II of the SEA Directive has been transposed into national legislation via Schedule 1 of S.I. 435/2004.

This SEA Screening, which considers the modifications to the WCC Draft LACAP, has been carried out in accordance with above legislation.



2.4 Relevant SEA Guidance

This SEA Screening has been carried out in accordance with and having appropriate regard to the following guidance documents:

- Good Practice Guidance on SEA Screening (EPA, 2021).
- Synthesis Report on Developing A Strategic Environmental Assessment (SEA) Methodologies For Plans And Programmes In Ireland (EPA, 2013).
- Synthesis Report on Developing A Strategic Environmental Assessment (Sea) Methodologies for Plans and Programmes in Ireland (EPA, 2003).
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities
- Implementation of Directive 2001/43 on the Assessment of the Effects of Certain Plans and Programmes on the Environment (European Commission, ND).

2.5 Appropriate Assessment and relationship to SEA Screening

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

The first step in the process is to establish whether AA is required for the particular plan or project. This first step is referred to as 'AA Screening' and the purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a European site in view of the site's conservation objectives.

Article 3(c) of the SEA Directive requires that an SEA is carried out on a P/P wherever such a P/P requires an AA under the EU Habitats Directive (92/43/EEC).

An AA Screening Report has also been prepared for the Plan Action modifications in this case in accordance with Article 6(3) of the EU Habitats Directive (92/43/EEC). The Report concludes the following:

It is concluded in view of best scientific knowledge and in view of conservation objectives, that the Modifications to the Draft LACAP will not give rise to any likely significant effects on designated European sites, alone or in combination with other plans or projects. Consequently, a Stage 2 AA is not required for the Plan modifications.

This AA Screening Report will also accompany the documented Plan Action modifications.



3. MODIFICATIONS TO THE LOCAL AUTHORITY CLIMATE ACTION PLAN

A summary of Plan Action modifications arising following consideration of consultation submissions is provided in Table 3-1.

Table 3-1: Summary of Plan Action Modifications

Action	Summary of Modification
2.2	The following text has been added to the action after the word "fleet": Replace fossil fuels with renewable fuel in WCCC Fleet whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced.
5.11	The following text has been added to the action after the word "services": Run waste engagement campaigns through the library services including events such as seed library exchanges, clothes swaps and repair cafes.
4.31	The word "public" has replaced the words "community and employers representatives" in the following action: Create regular Climate Communications to keep the public up to date on how they can contribute to Climate Action in Waterford.
4.16	The word "plan" has replaced the words "devise planning" in the following action: Plan events around 'playful city' principles, E.g. Community Car Free afternoons on Sundays or on days of community festivals.
3.26	The following action has been reworded; the sentence "The Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk" has been deleted and the sentence "Through advising the farming community and running information campaigns" has been added: Support and inform a climate-proofing programme for natural water resources to manage flooding at the catchment level. Through advising the farming community and running information campaigns.
3.8	The following text has been added to the action after the word "spaces": Map green infrastructure (GI) – identify wildlife corridors, conservation and restoration spaces. Under the County Development Plan a Blue Green Infrastructure Strategy is being developed.
2.56	The following action has been reworded: Ensure climate-proofing of heritage funding administered by WCCC, with an emphasis on improved energy performance along with the main goal of conservation of buildings.
2.37	The following action has been reworded: Life Cycle Analysis methodology, consideration of carbon emissions, and consideration of water quality impact to be used in housing and building works planning and for planning permission from 2027 following adoption of National Policy on Life Cycle Assessment.



Action	Summary of Modification
2.36	The following text has been added to the action after the word "County": Carry out a geothermal survey of the county to identify areas with the greatest opportunity for heat production near Council buildings. Survey will include a feasibility assessment for the incorporation of Geothermal into existing heating systems.
2.34	The word "application" has been replaced with the word "decisions" in the following action: Planning decisions process to assess impact of new development proposed in areas determined to have a water supply and quality constraint (i.e., from climate related drought, extreme rainfall events). Assess impact on wastewater discharges and DWWTS and mitigate impacts.
2.8	The words "bus connects" have been added at the end of the following action: Liaise with the NTA to improve systems:- Integration between rail and WMATS (North Quays)- Bus stop facilities- Bus Connects

3.1 SEA Screening Assessment of Plan Modifications

The following has been considered when carrying out the SEA Screening Assessment of Plan Action modifications to the Draft LACAP.

- The likely significant effect on the environment of implementing the Draft LACAP.
- The likely significant effect on the environment of implementing the Plan Action modifications.
- The Strategic Environmental Objectives (SEOs) defined in Section 5 of the Draft SEA Environmental Report for the WCC Draft LACAP that the Plan modifications must accord with and support.
- The mitigation measures defined in Section 8 of Draft SEA Environmental Report and Section 5 of the Draft NIR.

Therefore, the Plan Action modifications must be considered in relation to the current Draft LACAP which has already been subject to SEA and AA considerations. All Plan Action modifications are considered therefore in the context of potential additional sources for impacts/effects which were not previously considered.



4. STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING

This section of the report documents the SEA Screening undertaken.

Stage 1 Applicability Analysis was undertaken initially. This analysis is detailed in Section 4.1 of this report (Table 4-1 and Table 4-2).

Stage 2 Screening Analysis was then undertaken. This analysis is detailed in Section 4.2 of this report (Table 4-3, Table 4-4 and Table 4-5).

4.1 Stage 1 - SEA Applicability Analysis

Table 4-1: SEA Applicability Analysis

SEA Applicability Analysis	
Status of Plan/Programme Maker	
Is the P/P prepared and/or adopted by an authority at national, regional or local level or prepared by an authority for adoption through a legislative procedure by Parliament or Government?	The LACAP has been prepared by a local authority in accordance with Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021
Is the P/P required by legislative, regulatory, or administrative provisions?	The LACAP is required under the Climate Action and Low Carbon Development (Amendment) Act 2021
Nature of the Plan/Programme	
Is the P/P prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use?	The LACAP is a cross-sectoral plan that targets a variety of sectors, including the energy, industry, transport, waste management and water management sectors.
Does the P/P provide a framework for the development consent for projects listed in the EIA Directive?	Neither LACAP nor the Plan Action Modifications to the LACAP provide a framework for development consent.
Is the P/P likely to have a significant effect on a Natura 2000 site which leads to a requirement for Article 6 or 7 assessments?	An NIR has been completed for the Draft LACAP. An AA Screening Report has been completed for the Plan Action modifications arising following the Plan/SEA consultation period. These documents have concluded that the neither the Draft LACAP nor Plan Action modifications will not give rise to any significant effects on designated European sites, alone or in combination with other plans or projects, with the adoption of defined mitigation measures.



SEA Applicability Analysis	
Exemptions	
Is the sole purpose of the P/P to serve national defence or civil emergency or is it a financial/budget P/P or is it co-financed by the current SF/RDF programme?	No, for all questions.

Table 4-2: Summary of SEA Applicability Analysis

Summary of SEA Applicability Analysis	
Applicability Analysis Criterion	Outcome (Yes or No)
Is the P/P prepared and/or adopted by an authority at national, regional or local level or prepared by an authority for adoption through a legislative procedure by Parliament or Government?	Yes
Is the P/P required by legislative, regulatory, or administrative provisions?	Yes
Is the P/P prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use?	Yes
Does the P/P provide a framework for the development consent for projects listed in the EIA Directive?	No
Is the P/P likely to have a significant effect on a Natura 2000 site which leads to a requirement for Article 6 or 7 assessments?	No
Is the sole purpose of the P/P to serve national defence or civil emergency or is it a financial/budget P/P or is it co-financed by the current SF/RDF programme?	No
Conclusion	
Having regard to the SEA Screening steps identified by the EPA guidance in Figure 1-1, Stage 2 SEA Screening Analysis is required to whether the Plan Action modifications to the Draft LACAP in this case are likely to have significant effects on the environment and whether SEA must be carried out on such Plan Action modifications.	



4.2 Stage 2 - SEA Screening Analysis

To inform the Stage 2 SEA Screening Analysis, an evaluation of the potential environmental implications of each Plan Action modification has been carried out. This evaluation is presented in Table 4-3.

Table 4-3: Evaluation of Potential Environmental Implications of each Plan Action Modification

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
2.2	The following text has been added to the action after the word "fleet": Replace fossil fuels with renewable fuel in WCCC Fleet whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced.	This amendment clarifies the text of the action previously considered and mitigated against through the development and Environmental Governance Principle framework. It considers the sources of the energy and fuels to be used by the LA vehicles. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.
5.11	The following text has been added to the action after the word "services": Run waste engagement campaigns through the library services including events such as seed library exchanges, clothes swaps and repair cafes.	This amended action provides clarification to the text previously considered. It adds more examples of engagement campaigns that could be done. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.
4.31	The word "public" has replaced the words "community and employers representatives" in the following action: Create regular Climate Communications to keep the public up to date on how they can contribute to Climate Action in Waterford.	This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.
4.16	The word "plan" has replaced the words "devise planning" in the following action: Plan events around 'playful city' principles, E.g. Community Car Free afternoons on Sundays or on days of community festivals.	This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.



Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
3.26	<p>The following action has been reworded; the sentence "The Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk" has been deleted and the sentence "Through advising the farming community and running information campaigns" has been added:</p> <p>Support and inform a climate-proofing programme for natural water resources to manage flooding at the catchment level. Through advising the farming community and running information campaigns.</p>	<p>This amended action provides clarification to the text previously considered. It considers the farming community and information campaigns. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
3.8	<p>The following text has been added to the action after the word "spaces":</p> <p>Map green infrastructure (GI) – identify wildlife corridors, conservation and restoration spaces. Under the County Development Plan a Blue Green Infrastructure Strategy is being developed.</p>	<p>This amendment clarifies the text of an action previously considered. It references the Blue Green Infrastructure Strategy being developed under the County Development Plan, which has been subject to its own SEA and AA. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
2.56	<p>The following action has been reworded:</p> <p>Ensure climate-proofing of heritage funding administered by WCCC, with an emphasis on improved energy performance along with the main goal of conservation of buildings.</p>	<p>This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
2.37	<p>The following action has been reworded:</p> <p>Life Cycle Analysis methodology, consideration of carbon emissions, and consideration of water quality impact to be used in housing and building works planning and for planning permission from 2027 following adoption of National Policy on Life Cycle Assessment.</p>	<p>This amended action provides clarification to the text previously considered. It considers the National Policy on Life Cycle Assessment. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>



Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
2.36	<p>The following text has been added to the action after the word "County":</p> <p>Carry out a geothermal survey of the county to identify areas with the greatest opportunity for heat production near Council buildings. Survey will include a feasibility assessment for the incorporation of Geothermal into existing heating systems.</p>	<p>This amended action provides clarification to the text previously considered. It details the purpose of the survey and feasibility assessment. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
2.34	<p>The word "application" has been replaced with the word "decisions" in the following action:</p> <p>Planning decisions process to assess impact of new development proposed in areas determined to have a water supply and quality constraint (i.e., from climate related drought, extreme rainfall events). Assess impact on wastewater discharges and DWWTS and mitigate impacts.</p>	<p>This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
2.8	<p>The words "bus connects" have been added at the end of the following action:</p> <p>Liaise with the NTA to improve systems:- Integration between rail and WMATS (North Quays)- Bus stop facilities- Bus Connects</p>	<p>This amendment clarifies text of an action previously considered. It clarifies the focus of the action and in particular how the Council will use its control and influence to support the Bus Connects programme. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>

Stage 2 SEA Screening Analysis has been carried out to determine whether a P/P is likely to have significant effects on the environment and whether SEA must be carried out in conjunction with a P/P. This analysis is presented in Table 4-4 and Table 4-5.



Table 4-4: Criteria for Determining the Likely Significance of Environmental Effects - Characteristics of the Plan

Potential Significant Effects	
Characteristics of the plan or programme having regard, in particular to:	
The degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources	<p>The Plan Action modifications do not set out a development control related framework for projects or activities, either with regard to the location, nature, size and operating conditions or by allocating resources.</p> <p>The Plan Action modifications will not result in the occurrence of any significant environmental effects in this regard.</p>
The degree to which the plan or programme influences other plans and programmes including those in a hierarchy	<p>Section 18, Part 3 of the Climate Acts 2015-2021 and Section 10 (2) of the Planning and Development Act 2000 (as amended) require that local authorities take account of their LACAPs when preparing a County Development Plan (CDP).</p> <p>The Plan Action modifications will not however influence the County Development Plan (CDP) to a degree that results in the occurrence of additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p>
The relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development	<p>The Plan Actions defined in the LACAP are broadly supportive of climate action (mitigation and adaptation) and sustainability. The Plan Actions will support the achievement of GHG emission reduction requirements.</p> <p>The Plan Action modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP.</p> <p>The Plan Action modifications will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p>
Environmental problems relevant to the plan or programme	<p>The Plan Action modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP. They do not give rise to any environmental problems not previously considered. The Plan Action modifications will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p>
The relevance of the plan or programme for the implementation of European Union legislation on the environment (e.g., plans linked to waste-management or water protection)	<p>The LACAP will support the achievement of European Climate Law (Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999) at local level.</p>



Potential Significant Effects	
Characteristics of the plan or programme having regard, in particular to:	
	The Plan Action modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP and do not materially alter the LACAP however.

Table 4-5: Criteria for Determining Potential for Significant Effects - Characteristics of the Effects

Potential for Significant Effects	
Characteristics of the Effects and the Area likely to be affected, having regard in particular to:	
The probability, duration, frequency and reversibility of the effects	<p>The Plan Action modifications will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p> <p>The Plan Action modification will not create any material cumulative or transboundary environmental impacts.</p> <p>They will not create any risks to human health or the environment.</p> <p>They will not result in any environmental effect that will affect the sensitivity of the receiving environment or result in the exceedance of any prescribed Environmental Quality Standards.</p> <p>They will not result in an intensive land use not previously considered.</p> <p>They will not give risk to any significant landscape related impacts not previously considered during the SEA process.</p>
The cumulative nature of the effects	
The transboundary nature of the effects	
The risks to human health or the environment (e.g., due to accidents)	
The magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)	
The value and vulnerability of the area likely to be affected due to:	
<ul style="list-style-type: none"> Special natural characteristics or cultural heritage; 	
<ul style="list-style-type: none"> Exceeded environmental quality standards or limit values; Intensive land-use 	



Potential for Significant Effects

Characteristics of the Effects and the Area likely to be affected, having regard in particular to:

The effects on areas or landscapes which have a recognised national, community or international protection status	
---	--



Table 4-6: Summary of SEA Screening Analysis

Summary of SEA Screening Analysis

Having regard to the Stage 2 Screening Analysis undertaken in Table 4-5, it is concluded that the Plan Action modifications to the Draft LACAP in this case will not result in the occurrence of any additional environmental impacts not previously considered or mitigated against in the Draft LACAP.



5. CONCLUSIONS

SEA Screening was carried out to determine the need for a SEA for the Plan modifications to the Draft LACAP in this case. It has been concluded, based on the pre-screening check, and review against the environmental significance criteria as set out in Annex II of the SEA Directive, that the Modifications to the Draft LACAP will not give rise to likely significant effects on the environment.

The principal reasons the Modifications to the Draft LACAP will not give rise to likely significant effects on the environment are as follows:

- The modifications are only intended to provide clarification on existing Climate Actions defined in the Draft LACAP and make the LACAP more operative and focussed.
- The modifications are not material and will not result in any additional, likely significant environmental effects not already considered in the SEA Environmental Report for the Draft LACAP.

It is concluded that the Modifications to the Draft LACAP will not give rise to likely significant effects on the environment. Consequently, a full SEA is not required for the Plan modifications.



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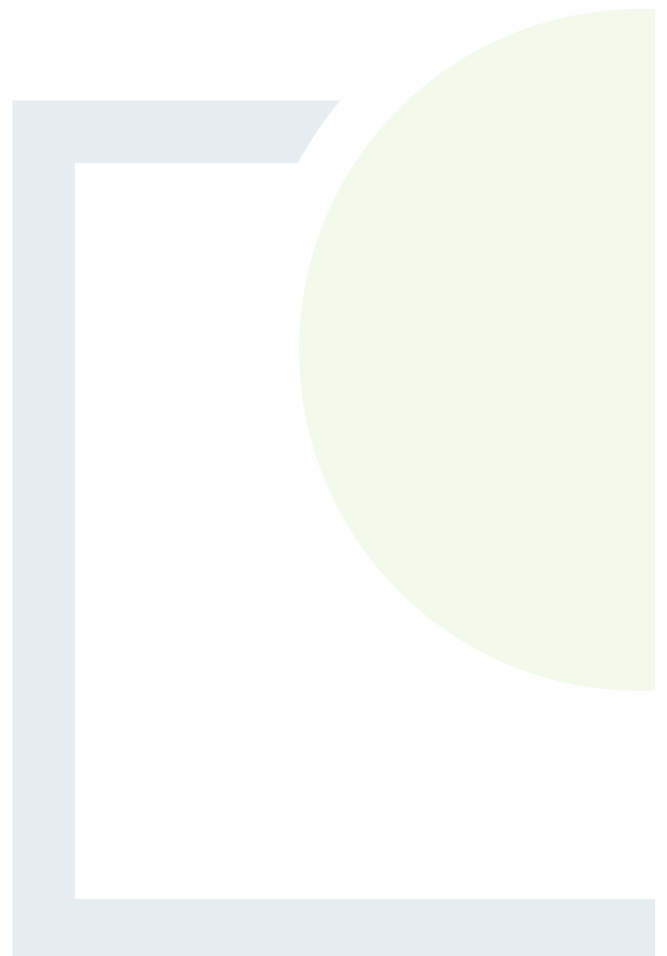




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APPENDIX 5

AA Screening Report
for Plan
Modifications





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ENVIRONMENTAL SCIENCE &
PLANNING

APPROPRIATE ASSESSMENT SCREENING REPORT

AA Screening Report For Modifications To The Local Authority Climate Action Plan 2024 - 2029

Prepared for:
Waterford County Council



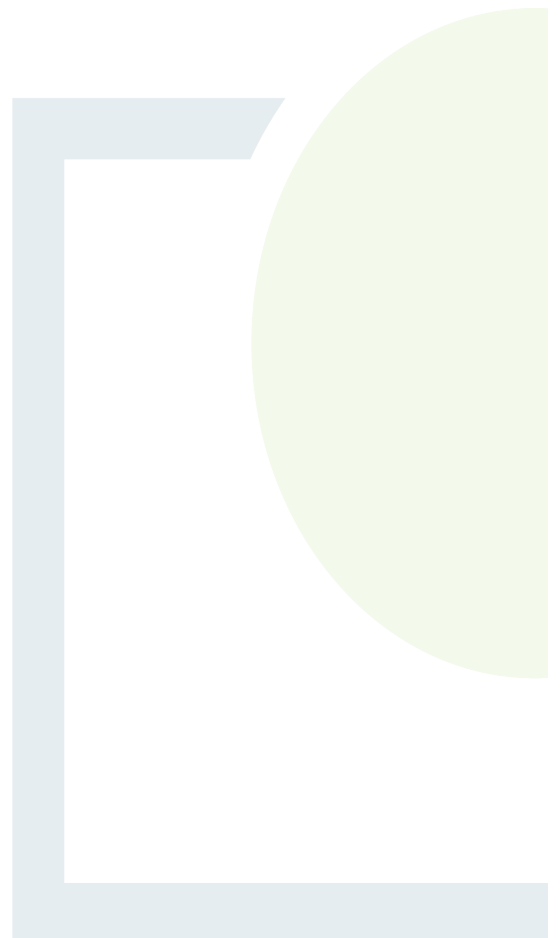
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Appropriate Assessment Screening Report for Modifications to the Local Authority Climate Action Plan 2024 - 2029

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

User is responsible for Checking the Revision Status of This Document

Rev. No.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
1	Final	BF/AMW	AT	AT	12/01/2024

Client: Waterford County Council

Keywords: Appropriate Assessment Screening Report, Appropriate Assessment, AA, Natura Impact Report, LACAP, Climate Action Plan Implementation Plan.

Abstract: Fehily Timoney and Company is pleased to submit this AA Screening Report for Modifications to the Local Authority Climate Action 2024 - 2029 to Waterford County Council.

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1. INTRODUCTION

1.1 Background

This is the Appropriate Assessment (AA) Screening Report for modifications to the Waterford County Council (WCC) Local Authority Climate Action Plan (referred to as either the 'LACAP' or the 'Plan') 2024 - 2029.

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 sets out the provisions governing the establishment and operation of a LACAP. The broad purpose of a LACAP will be to define adaptation and mitigation measures at local level to support the reduction of Greenhouse Gas (GHG) emissions within a local authority as an organization and throughout the local community. LACAPs shall be implemented over a five-year period.

1.2 Plan-making Process to Date

A draft version of the LACAP was prepared. This document was accompanied by a Draft Natura Impact Report (NIR) which considered, evaluated and presented the environmental effects of the Draft LACAP on European sites and presented mitigation measures to avoid or minimise identified effects. This AA process was carried out in accordance with the requirements of the Habitats Directive¹ and transposing national legislation.

Strategic Environmental Assessment (SEA) was also undertaken on the Draft LACAP in accordance with the requirements of the SEA Directive² and transposing national legislation. A Draft SEA Environmental Report which considered the effects of the Draft LACAP on the environment was therefore prepared also. The Draft NIR suitably informed this report.

A period of consultation has been undertaken in relation to the Draft LACAP, the Draft SEA Environmental Report and the Draft NIR. Statutory environmental authorities, interested stakeholders and members of the public were invited to make submissions in connection with the Draft LACAP and the associated Draft SEA Environmental Report and Draft NIR.

All submissions made on this documentation have been reviewed by WCC. These submissions were taken into consideration prior to finalisation of the LACAP. WCC have prepared an Chief Executive Report on the submissions received. This document details the submissions received, WCC responses to the submissions, and Plan Action modifications arising following consideration of the submissions.

1.3 Purpose of this Assessment

An AA Screening Assessment must be carried out on all modifications made to the Draft LACAP Actions arising following consideration of submissions. The purpose of this assessment is to identify whether the Plan Action modifications will result in additional effects on European sites not previously considered in the AA process to date, and to inform whether or not a full AA is required on the Plan Action modifications. This AA Screening Assessment considers changes the binding 'Actions' defined within the Plan.

¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment



This report documents the AA Screening undertaken to identify the need for full AA in this case. This report accompany the documented Plan Action modifications.

This report should be read in conjunction with the following documents:

1. The Waterford County Council LACAP 2024 - 2029.
2. The Draft NIR for the Waterford County Council LACAP 2024 - 2029.
3. The Draft SEA Environmental Report for the Waterford County Council LACAP 2024 - 2029.
4. Waterford County Council LACAP Submissions Chief Executive Report.
5. The SEA Screening Report for modifications to Waterford County Council LACAP 2024 - 2029.



2. APPROPRIATE ASSESSMENT SCREENING METHODOLOGY

2.1 Legislative Requirements

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) provides legal protection for habitats and species of European importance. The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the “favourable conservation status” of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable among them. These two designations are collectively known and referred to as European sites.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended). Specifically, Article 6(3) of the Habitats Directive states:

"Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public".

Therefore, the AA process is an assessment of the following key concepts:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site.
- Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

The provisions of Article 6(3) do not apply where the proposed plan or project is ‘connected with or necessary to the management of the site’. Where a formal consent process applies, the AA process is concluded by the relevant competent authority making a determination in accordance with article 6(3) of the Habitats Directive.

2.2 Guidance

The assessment was conducted in accordance with the following guidance:

- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (European Commission, 2002).



- This document was updated by Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Commission Notice (2021) Brussels, 28.9.2021 C(2021) 6913 final;
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010);
- Commission Notice: Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2018). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019;
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission 2013;
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, Office of the Planning Regulator (2021).

The AA screening is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives. The EPA Envision Map-viewer (www.epa.ie) and available reports were also reviewed:

- Definitions of conservation status, integrity and significance used in this assessment are defined in accordance with 'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC' (EC, 2000).
- The conservation status of a natural habitat is defined as the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species;
- The conservation status of a species is defined as the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its population;
- The integrity of a European Site is defined as the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified; and
- Significant effect should be determined in relation to the specific features and environmental conditions of the protected site concerned by the plan or project, taking particular account of the site's conservation objectives.

2.3 Assessment Process and Approach

A Draft NIR has been produced for the WCC Draft LACAP. This report contains the information on the receiving environment, European sites, and potential effects of the Draft LACAP on European sites. The report also defines mitigation measures designed to avoid and minimise effects on European sites. The information contained in this Draft NIR has been referred to during the carrying out of the AA Screening Assessment documented in this report.

This assessment commences with a description of the Plan Action modifications being considered. The type of impacts that are likely due to the Plan Action modifications are then identified and evaluated having regard to nature and characteristics of the Plan Action modifications. The overall AA process will be completed in a revised full NIR at the end of the plan development process incorporating all interim steps, modifications and reports/assessments.



An ecological desktop study has been completed for the AA Screening Assessment of the Plan Action modifications, which comprised the following elements:

- Identification of European sites that may be impacted by Plan Action modifications.
- Identification of European sites pathways.
- Review of the NPWS site synopses and conservation objectives for relevant European sites.
- Examination of available information on protected species.

This desktop assessment mainly involved a review of the Draft NIR produced for the Draft LACAP.

The process of determining the likelihood of significant effects from a plan or a project on European sites is an iterative process centred around a Source-Pathway-Receptor (S-P-R) model. In order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g., pollutant run-off, noise, removal of vegetation etc.;
- Pathway(s) – ecological connectivity linkages e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – ecological resources supporting the qualifying habitats and species of European sites.

In the context of this report, a receptor is an ecological feature that is known to be utilised by the Qualifying Interests (QI) or Special Conservation Interests (SCI) of a European site. A source is any identifiable element of the Plan Action modifications that is known to interact with ecological processes. A pathway is any connection or link between the source and the receptor³.

An important element of the AA process is the identification of the Conservation Objectives, QIs and/ or SCIs of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

The likelihood of significant effects, including in-combination effects, on European Sites is then interrogated having regard to the nature and characteristics of Plan Action modifications, environmental pathways, and the sensitivity of relevant European sites.

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the Plan Action modification must be will be subject to Stage 2 AA and the preparation of a Natura Impact Report (NIR).

³ Qualifying interest or special conservation interests of the European site in question and the known sensitivities of these key ecological receptors



Having regard to the European Commission Communication on the Precautionary Principle (European Commission, 2000) the:

“absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved.”

This AA screening is based on best scientific knowledge and has utilised ecological expertise. In addition, a detailed online review of published scientific literature and ‘grey’ literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives.



3. MODIFICATIONS TO THE LOCAL AUTHORITY CLIMATE ACTION PLAN

A summary of Plan Action modifications arising following consideration of consultation submissions is provided in Table 3-1.

Table 3-1: Summary of Plan Action Modifications

Action	Summary of Modification
2.2	The following text has been added to the action after the word "fleet": Replace fossil fuels with renewable fuel in WCCC Fleet whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced.
5.11	The following text has been added to the action after the word "services": Run waste engagement campaigns through the library services including events such as seed library exchanges, clothes swaps and repair cafes.
4.31	The word "public" has replaced the words "community and employers representatives" in the following action: Create regular Climate Communications to keep the public up to date on how they can contribute to Climate Action in Waterford.
4.16	The word "plan" has replaced the words "devise planning" in the following action: Plan events around 'playful city' principles, E.g. Community Car Free afternoons on Sundays or on days of community festivals.
3.26	The following action has been reworded; the sentence "The Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk" has been deleted and the sentence "Through advising the farming community and running information campaigns" has been added: Support and inform a climate-proofing programme for natural water resources to manage flooding at the catchment level. Through advising the farming community and running information campaigns.
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2.8	<p>The words "bus connects" have been added at the end of the following action:</p> <p>Liaise with the NTA to improve systems:- Integration between rail and WMATS (North Quays)- Bus stop facilities- Bus Connects</p>



4. SCREENING FOR APPROPRIATE ASSESSMENT

4.1 Introduction to Screening

This stage of the process identifies any likely significant effects to European Sites from the Plan Action modifications, either alone or in combination with other projects or plans.

The following has been considered when carrying out the AA Screening Assessment of Plan Action modifications to the Draft LACAP.

- The likely significant effect on the environment and European sites of implementing the Draft LACAP.
- The likely significant effect on the environment and European sites of implementing the Plan Action modifications.
- The mitigation measures defined in Section 5 of the Draft NIR.

Therefore, the Plan Action modifications must be considered in relation to the current Draft LACAP which has already been subject to SEA and AA considerations. All Plan Action modifications are considered therefore in the context of potential additional sources for impacts/effects which were not previously considered.

The first stage of the Screening process in this case involved interrogating Plan Action modifications to ascertain the materiality of the modifications and whether the modifications will result in the occurrence of additional effects on European sites not previously considered in the AA process to date.

4.2 Assessment Criteria

The following parameters are described when characterising impacts (following CIEEM (2016), EPA (2002) and NRA (2009)):

- **Direct and Indirect Impacts** - An impact can be caused either as a direct or as an indirect consequence of a proposed development.
- **Magnitude** - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- **Extent** - The area over which the impact occurs – this should be predicted in a quantified manner.
- **Duration** - The time for which the effect is expected to last prior to recovery or replacement of the resource or feature.
 - Temporary: Up to 1 Year;
 - Short Term: The effects would take 1-7 years to be mitigated;
 - Medium Term: The effects would take 7-15 years to be mitigated;
 - Long Term: The effects would take 15-60 years to be mitigated; and
 - Permanent: The effects would take 60+ years to be mitigated.
- **Likelihood** - The probability of the effect occurring taking into account all available information.
 - Certain/Near Certain: >95% chance of occurring as predicted;
 - Probable: 50-95% chance as occurring as predicted;
 - Unlikely: 5-50% chance as occurring as predicted; and
 - Extremely Unlikely: <5% chance as occurring as predicted.



The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

SSCOs have been prepared for a number of European Sites. These detailed SSCO's aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a species can be described as being achieved when: 'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.'

Favourable conservation status of a habitat can be described as being achieved when: 'its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable'.

Generic Conservation Objectives for SACs have been provided as follows:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

One generic Conservation Objective has been provided for SPAs as follows:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

EC guidance⁴ outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take;
- Resource Requirements (Drinking Water Abstraction Etc.);
- Emissions (Disposal to Land, Water or Air);

⁴ Assessment of plans and Projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Environment DG, 2001.



- Excavation Requirements;
- Transportation Requirements;
- Duration of Construction, Operation, Decommissioning.

In addition, the guidance outlines the following likely changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Reduction of Habitat Area.
- Disturbance to Key Species.
- Habitat or Species Fragmentation.
- Reduction in Species Density.
- Changes in Key Indicators of Conservation Value (Water Quality Etc.).
- Climate Change.

4.3 Elements of the Plan Modifications with Potential to Give Rise to Effects

An evaluation of the potential environmental implications of each Plan Action modification has been carried out. This evaluation is presented in Table 4-1.



Table 4-1: Evaluation of Potential Environmental Implications of each Plan Action Modification

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
2.2	<p>The following text has been added to the action after the word "fleet": Replace fossil fuels with renewable fuel in WCCC Fleet whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced.</p>	<p>This amendment clarifies the text of the action previously considered and mitigated against through the development and Environmental Governance Principle framework. It considers the sources of the energy and fuels to be used by the LA vehicles. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
5.11	<p>The following text has been added to the action after the word "services": Run waste engagement campaigns through the library services including events such as seed library exchanges, clothes swaps and repair cafes.</p>	<p>This amended action provides clarification to the text previously considered. It adds more examples of engagement campaigns that could be done. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
4.31	<p>The word "public" has replaced the words "community and employers representatives" in the following action: Create regular Climate Communications to keep the public up to date on how they can contribute to Climate Action in Waterford.</p>	<p>This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
4.16	<p>The word "plan" has replaced the words "devise planning" in the following action: Plan events around 'playful city' principles, E.g. Community Car Free afternoons on Sundays or on days of community festivals.</p>	<p>This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>
3.26	<p>The following action has been reworded; the sentence "The Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk" has been deleted and the sentence "Through advising the farming community and running information campaigns" has been added: Support and inform a climate-proofing programme for natural water resources to manage flooding at the catchment level. Through advising the farming community and running information campaigns.</p>	<p>This amended action provides clarification to the text previously considered. It considers the farming community and information campaigns. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>



Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
3.8	The following text has been added to the action after the word "spaces": Map green infrastructure (GI) – identify wildlife corridors, conservation and restoration spaces. Under the County Development Plan a Blue Green Infrastructure Strategy is being developed.	This amendment clarifies the text of an action previously considered. It references the Blue Green Infrastructure Strategy being developed under the County Development Plan, which has been subject to its own SEA and AA. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.
2.56	The following action has been reworded: Ensure climate-proofing of heritage funding administered by WCCC, with an emphasis on improved energy performance along with the main goal of conservation of buildings.	This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.
2.37	The following action has been reworded: Life Cycle Analysis methodology, consideration of carbon emissions, and consideration of water quality impact to be used in housing and building works planning and for planning permission from 2027 following adoption of National Policy on Life Cycle Assessment.	This amended action provides clarification to the text previously considered. It considers the National Policy on Life Cycle Assessment. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.
2.36	The following text has been added to the action after the word "County": Carry out a geothermal survey of the county to identify areas with the greatest opportunity for heat production near Council buildings. Survey will include a feasibility assessment for the incorporation of Geothermal into existing heating systems.	This amended action provides clarification to the text previously considered. It details the purpose of the survey and feasibility assessment. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.
2.34	The word "application" has been replaced with the word "decisions" in the following action: Planning decisions process to assess impact of new development proposed in areas determined to have a water supply and quality constraint (i.e., from climate related drought, extreme rainfall events). Assess impact on wastewater discharges and DWWTS and mitigate impacts.	This amended action provides clarification to the text previously considered. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.



Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
2.8	<p>The words "bus connects" have been added at the end of the following action:</p> <p>Liaise with the NTA to improve systems:- Integration between rail and WMATS (North Quays)- Bus stop facilities- Bus Connects</p>	<p>This amendment clarifies text of an action previously considered. It clarifies the focus of the action and in particular how the Council will use its control and influence to support the Bus Connects programme. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA and AA process.</p>



4.1 Summary of the Evaluation

The Plan Action modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP having regard to the consultation process. They will not result in any additional sources for likely, significant environmental effects, including effects on ecological processes or European sites, not already considered by the existing NIR for the Draft LACAP.

The Plan Action modifications will not introduce any of the following types of additional environmental effect that have the potential to affect European sites.

- Land take;
- Resource Requirements (Drinking Water Abstraction Etc.);
- Emissions (Disposal to Land, Water or Air);
- Excavation;
- Transportation;
- Construction, Operation, Decommissioning activities.

The Plan Action modifications will not result in any of the following types of change that may occur at a European site, which may result in effects on the integrity and function of that site:

- Reduction of Habitat Area.
- Disturbance to Key Species.
- Habitat or Species Fragmentation.
- Reduction in Species Density.
- Changes in Key Indicators of Conservation Value (Water Quality Etc.).
- Climate Change impact.

Further assessment is therefore not required.

4.2 Other Plans and Programs

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or programmes that might, in combination with the plan or project, have the potential to adversely impact upon European Sites. There are no additional sources for effects identified within the Proposed amendments; therefore, there are no in-combination effects.



5. CONCLUSION

Stage 1 Screening for AA of Plan modifications was carried out to determine the need for a full AA for the Plan modifications to the Draft LACAP in this case. It has been demonstrated that implementation of the Plan modifications are not foreseen to have any significant effects on any European Site.

The principal reasons the Modifications to the Draft LACAP do will not give rise to any likely significant effects on designated European sites, alone or in combination with other plans or projects, are as follows:

- The modifications are only intended to provide clarification on existing Climate Actions defined in the Draft LACAP and make the LACAP more operative and focussed.
- The modifications are not material and will not result in any additional, likely significant environmental effects, including effects in ecological processes or European sites, not already considered in the NIR for the Draft LACAP.

It is concluded in view of best scientific knowledge and in view of conservation objectives, that the Modifications to the Draft LACAP will not give rise to any likely significant effects on designated European sites, alone or in combination with other plans or projects. Consequently, a Stage 2 AA is not required for the Plan modifications.



6. REFERENCES

Environment Heritage and Local Government (2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Dublin.

European Commission (2000) Communication from the Commission on the Precautionary Principle. Luxembourg.

European Commission (2002) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Communities.

European Commission (2013) Interpretation Manual of European Union Habitats. EUR 28.

European Commission (2019). Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. (2019/C 33/01). Brussels.

European Commission (2021) "Commission notice- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC."

Fossitt, J.A. (2000) A guide to habitats in Ireland. Heritage Council/Chomhairle Oidhreachta.

Office of the Planning Regulator (2021) OPR Practice Note PN01. Appropriate Assessment Screening for Development Management.

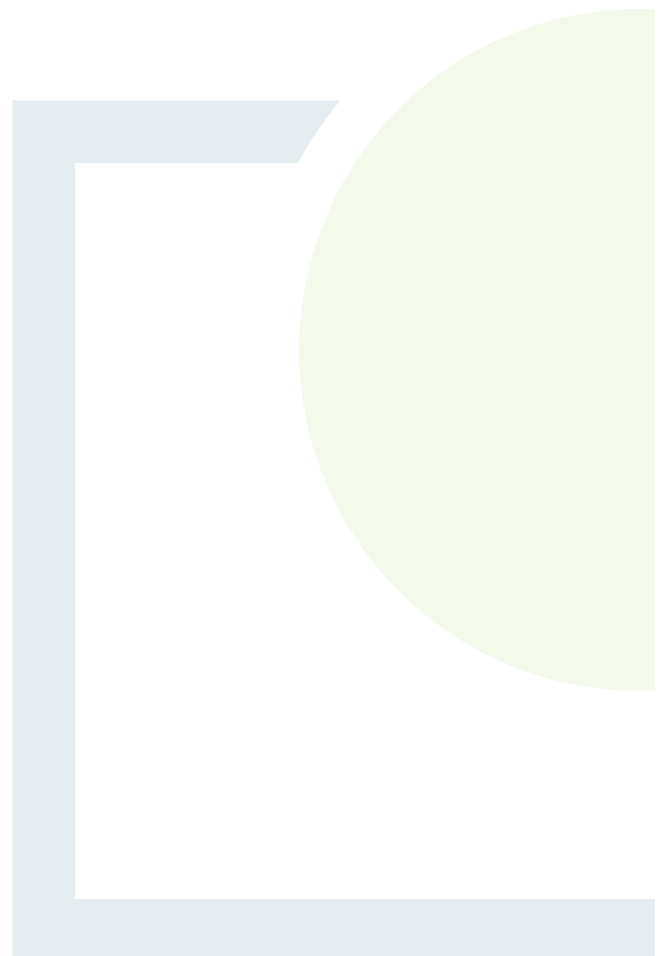
Scottish Natural Heritage (2016) Assessing Connectivity with Special Protection Areas (SPAs) Guidance.



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APPENDIX 1

Author Details



Author Details

Lead Author - Andrew Torsney is a Principal Ecologist with over 12 years' experience working on major national and local scale projects. Andrew graduated from University College Dublin in 2011 with a B.Sc. degree in Zoology and obtained Master's degree in Biodiversity and Conservation from the University of Leeds in 2012. He has a range of ecological skills which include habitat mapping, ecological surveying, data interpretation and report writing. Andrew is a vegetative plant specialist, who has a wealth of experience classifying riparian habitats and identifying rare floral species. Andrew has a vast knowledge of riparian and freshwater ecosystems and undertakes freshwater surveys regularly. Andrew holds 4 national protected species licenses and has a lot of experience optioning surveying licenses for aquatic species such as the white clawed crayfish. He is also a Bat specialist with a wealth of experience, in acoustic surveying and monitoring of bats. Throughout Andrews' career he has worked on a number of large-scale multifaceted projects such as the Killaloe to Dublin water supply project NIS. For this work, Andrew designed and oversaw all ecological field work relating to the Environmental Impact Assessment (EIA) and AA.

Andrew has been the principal ecologist for a range of projects including the AA of the National Wind Energy Guidelines, a number of AAs for County Councils and a range of large-scale infrastructure projects.



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