



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE &
PLANNING

LOCAL AUTHORITY CLIMATE ACTION PLAN

SEA Environmental Report

Prepared for:
Kildare County Council



Kildare County Council
Comhairle Contae Chill Dara

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Core House, Pouladuff Road, Cork, T12 D773, Ireland

T: +353 21 496 4133 | E: info@ftco.ie

CORK | DUBLIN | CARLOW

www.fehilytimoney.ie

SEA Environmental Report for the Local Authority Climate Action Plan 2024-2029 for Kildare County Council

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Abstract: Fehily Timoney and Company is pleased to submit this SEA Environmental Report for the LACAP 2024-2029 to Kildare 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 Local Authority Climate Action Plan (herein referred to as the 'Plan' or 'LACAP') 2024-2029 for the Kildare 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 organization 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 Plan.

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 Plan

The KCC 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 organization and throughout the local community in the local authority's functional area.

LACAPs have an inward and outward focus. Climate action in the plan has been defined by local authorities for their own organization 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 plan 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 be 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 & 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 Kildare was 247,774 persons, showing the trend of an increase in total population in the County by ca. 11.4% (25,270 persons) since the previous Census. Kildare is identified by the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019-2031 as being part of the Mid-East Region. The transitional population projection for the Dublin Metropolitan Area until 2031 is 813,500 persons
Biodiversity, Flora & Fauna	<ul style="list-style-type: none"> There are 7 designated SACs within, partially within or adjacent to the County, including: Ballynafagh Bog SAC (000391), Ballynafagh Lake SAC (001387), Mouds Bog SAC (002331), Pollardstown Fen SAC (000396), Red Bog, Kildare SAC (000397), River Barrow and River Nore SAC (002162), Rye Water Valley/Cartron SAC (001398). There is one 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: Carbury Bog NHA (001388), Hodgestown Bog NHA (001393). There are 7 pNHAs within or partially within the County, including: Ballina Bog, Ballynafage Bog, Ballynafage Lake, Barrow Valley at Tankardstown Bridge, Carbury Bog, Corballis Hill, Curragh, Derryvullagh Island, Donadea Wood, Dunlavin Marshes, Grand Canal, Hodgestown bog, Kilteel Wood, Liffey at Osberstown, Liffey Bank above Athgarvan, Liffey Valley Meander Belt, Mouds Bog, Oakpark, Pollardstown Fen, Pollaphouca Reservoir, Red Bog, Royal Canal, Rye Water Valley There is one Nature Reserve, at Pollardstown Fen Nature Reserve.
Landscape & Visual Amenity	<ul style="list-style-type: none"> Kildare is an inland county situated in the east-central part of Ireland. The Wicklow Mountains run along the east of the county. The county is mostly fertile arable land with many streams and river flowing through the Plan area. The Landscape Character Assessment in 2004 for Kildare divides the County into 16 Landscape Character Areas. In addition to this, Specific Views and Prospects for protection have been identified. High Amenity Areas have also been identified in the County.
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 with clusters found in towns and lower concentrations found in peatland areas. Castles, Churches, Ringforts and Grave Yards are amongst the most common recorded monuments. There are over 1,000 entries to the Record of Protected Structures within the County
Soils	<ul style="list-style-type: none"> Dominant soil types in the county include: Urban Soils, Grey-Brown Podzolics and Gleys. Other soil types in the county include Alluvial soils and Brown Earths
Land Use	<ul style="list-style-type: none"> Land use mapping for Kildare 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, peatland 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 (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) guidelines.



Environmental Component	Summary of the Baseline Environmental Characteristics
Water	<ul style="list-style-type: none"> Kildare is an inland county and doesn't have any coastlines. There are many rivers and lakes in the County. The County is located mainly within the Barrow, Liffey and Dublin Bay, and Boyne catchments. The WFD groundwater status (2016-2021) underlying Kildare is generally identified as being of Good status. The WFD status of rivers and streams (2016-2021) draining Kildare ranges from high (sections of rivers and streams, including sections of the Liffey), to good (sections of rivers and streams, including sections of the Liffey and Barrow), to moderate (sections of rivers and streams including: Kildoon and Cloncumber stream) and to poor (sections of rivers and streams including: Lyreen and Morell).
Material Assets	<ul style="list-style-type: none"> Kildare is traversed by two major roads networks – the M4 and the M7. 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, 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. Fáilte Ireland has recently published their four brand strategies which will define the spatial scope and spread of future tourism developments within Ireland. Kildare hosts 'Ireland's Ancient East', which includes Kildare village, historical monuments and the county's countryside. At county level, Kildare County Council has developed the Strategic Plan for Tourism in Kildare 2022-2027. Cultural Heritage sites also support heritage-related tourism and recreation
Climate Change	<ul style="list-style-type: none"> Kildare 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 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 & 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.
- 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 KCC'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.



Environmental Component	SEO Code	Strategic Environmental Objective
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 minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, 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.
	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.

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
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	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 Plan 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: Prioritize 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 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 realize 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 organizational, 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 realize potential environmental effects than Alternative 2.

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

Evaluation of the Environmental Effects of Plan 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 plan implementation is presented below:

- The variety of climate actions defined in the plan, including organizational and community based actions are likely to positive effect the climate environment
- 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.
- 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 negative environmental effects, including effects on local human receptors, biodiversity, landscape character and visual amenity, and the receiving noise environment.
- 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.
- Several plan 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 plan supports the carrying out of a range of flood alleviation 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 alleviation 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 and biodiversity environments.
- Plan actions support better resource management and the circular economy at organizational, 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 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.
- 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.
- 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 generated positive effects for these environmental receptors - by reducing the risk of such events impinging on or damaging these receptors.
- Plan 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.
- Plan 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.
- Plan 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.
- Plan 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 plan 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 plan making process and when considering plan alternatives. The preferred plan 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 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 plan 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 maximizing identified positive environmental effects of the LACAP.

Mitigation measures were proposed that maximize 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 plan. 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.

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 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 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 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.

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 realized, the LACAP should be reviewed and updated in a manner that supports the realization of all potential positive environmental effects, having regard to the overall vision and high-level objectives of the plan.



1. INTRODUCTION

1.1 Background

Kildare County Council (KCC) has prepared the Local Authority Climate Action Plan (herein referred to as the 'Plan' or 'LACAP') 2024-2029 for the Kildare functional area.

KCC's prospective LACAP will be a continuance of KCC's previous Climate Change Adaptation Strategy (which was subjected to SEA) published in 2019.

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 organization 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 Plan. Fehily Timoney and Company (FT) have been commissioned by KCC 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 is 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 on 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 PLAN

2.1 Overview

The KCC 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 organization and throughout the local community in the local authority's functional area.

LACAP should have an inward and outward focus. Climate action in the plan has been defined by local authorities for their own organization 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 plan 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 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 Plan Content

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

Table 2-1: LACAP Theme Area and Main Objectives

Theme Area	Main Objective
Governance and Leadership	Implement and resource the organisational structures required to deliver and monitor CAP implementation.
	Show leadership and ambition in mainstreaming climate action and governance change and awareness across services, by seeking to influence local and national policy using this leadership position, and by developing, piloting and supporting innovation for transformative decarbonisation and climate action projects.
	Align objectives and actions for climate, water and biodiversity within Local Authority work programmes to maximise impact and efficiency from existing resources and collaborate with other local authorities to encourage climate action initiatives.
Built Environment and Transport	To reduce greenhouse gas emissions, increase the use of renewable energy sources and increase energy efficiency throughout our housing, offices, infrastructure and transport fleet in line with national 2030 and 2050 targets.
	Through our spatial planning policy and objectives support the Core Strategy of the County Development Plan (any and review thereof), having consideration to core objectives as they relate to sustainable development, including aspects such as Town Centre First, active travel, sustainable mobility, sustainable energy and compact development, etc.
	Sustainable management of water resources should be included in the Local Authority planning application process and should include future impacts of climate change on water availability.
Natural Environment and Green Infrastructure	Promote and protect our environment and its biodiversity and water catchments as key enablers of climate adaptation and mitigation across the county through the delivery of sustainable services, including those with a focus on nature based solutions, in collaboration with sectors and communities.
	Promote green infrastructure as a strategically planned network of natural and semi-natural areas with other environmental features, designed and managed to deliver a wide range of ecosystem services, while also enhancing biodiversity.



Theme Area	Main Objective
	Protect and restore peatlands.
	Promote and support farmers in diversifying to lower carbon agricultural activities within the County.
Communities: Resilience & Transition	Build capacity and readiness with communities and other strategic partners to effect transformative climate action and motivate demand for climate action through capacity building programmes, policy/financial instruments and local development and wellbeing programmes.
	Ensure land use planning policy is cognisant of climate adaptation and flood risk within the County.
	Ensure emergency planning systems and plans address climate action to protect our assets and critical infrastructure from extreme weather events and to ensure a co-ordinated and resourced emergency response from all climate related emergencies and events, including flooding.
	Implement and support Just Transition actions within the County.
	Promote climate action and green skills in training and education in partnership with Education and Training Boards (ETBs) and Local Enterprise Offices (LEOs) to support and promote green jobs and enterprise.
Sustainability & Resource Management	Support renewable electricity generation, transmission and use within the County in line with national and regional policy including the Electricity Storage Policy Framework.
	Support circular initiatives and infrastructure within the County including prevention, reuse, repair and recycling.
	Increase collection of circular resources for renewable energy systems.

2.4 Overall Vision and Strategic Outcomes

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.



2.5 Relationship of the Plan 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.

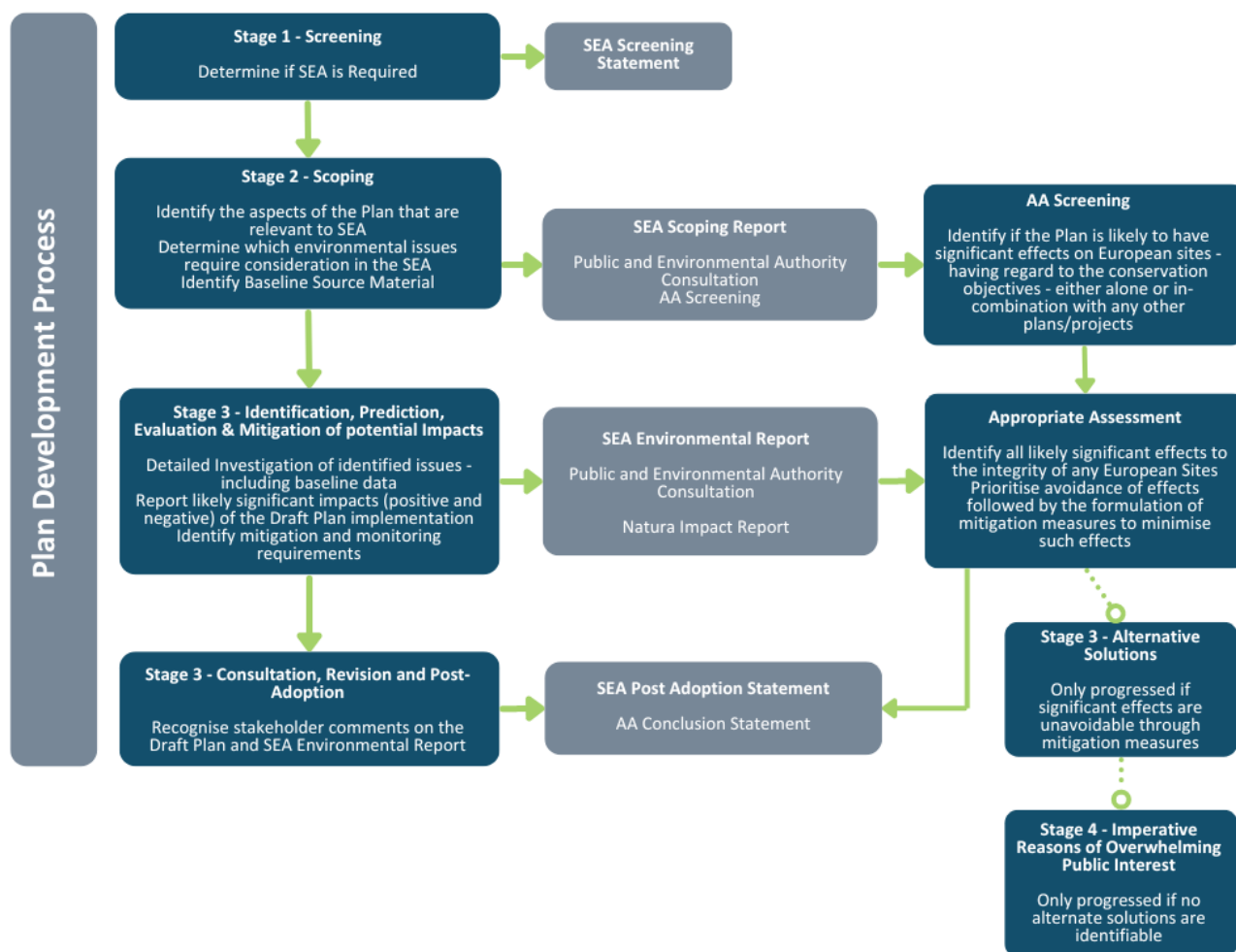


Figure 3-1: SEA and AA Stages and Key Deliverables



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 LACAP.

Taking into account the scope detailed in the SEA Scoping Report which was produced for the initial draft version on 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 a draft version of the LACAP on public display as part of the required statutory public consultation. The findings of the AA have been 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 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 plan.

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.

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

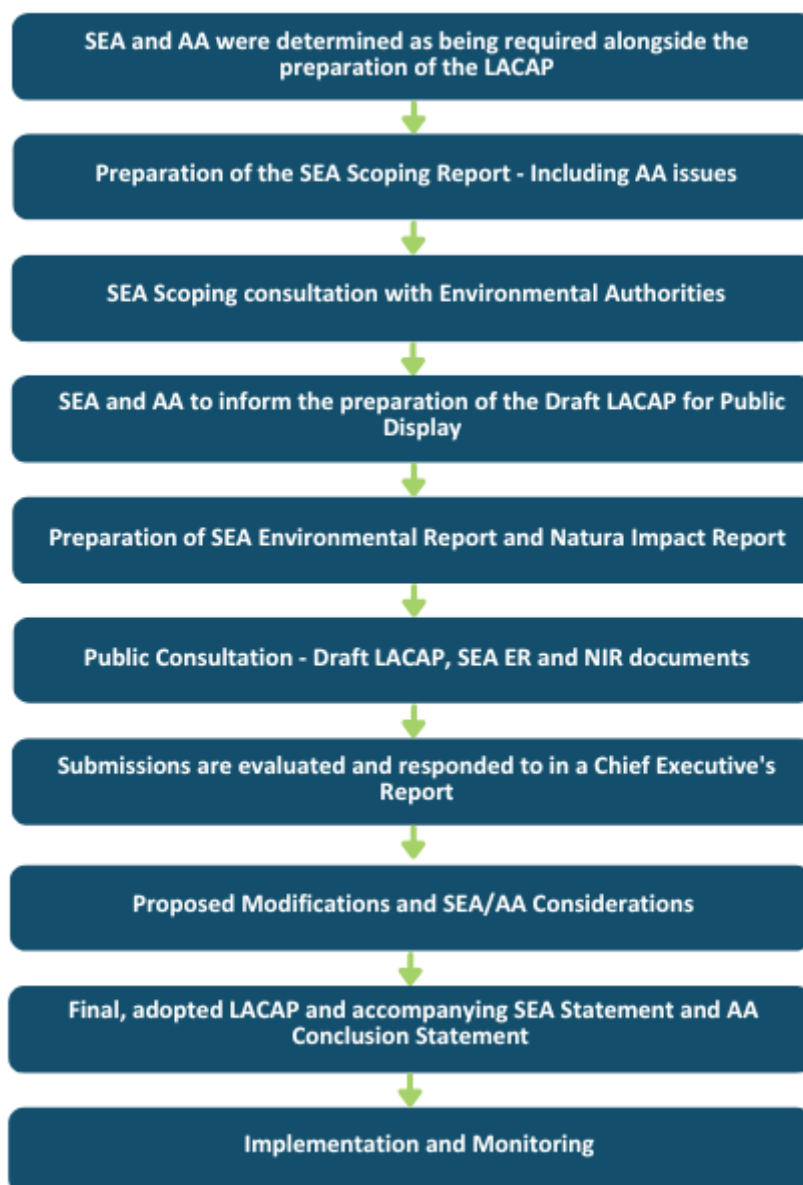


Figure 3-2: Overview of the SEA Process in the Review and Preparation of the Local Authority Climate Action Plan (including AA processes)

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 KCC 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.

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.

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

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."



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

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape & 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 and interested stakeholders 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.

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
- 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
- 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.

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 plan-making process to allow for adequate consideration of the likely, significant environmental effects of the plan and the incorporation of appropriate environmental mitigation measures into the plan. It should serve to guide the plan-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 plan 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 plan and monitoring measures to measure the environmental effects of the plan. It provides the plan-maker, 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.

¹¹ Eastern and Midland Region.



- 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 plan-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 during 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 was produced for KCC'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 a draft version of 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 KCC 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.



Name and Qualifications	Project Role	Relevant Experience
<p>Andrew Torsney</p> <p>PhD, Ecotourism and visitor Behaviour Analysis, Trinity College Dublin, 2018 – Present (Part time)</p> <p>MRes Biodiversity and Conservation (Hons.), University of Leeds, UK, 2011 - 2012</p> <p>BSc Zoology, University College Dublin, 2007 - 2011</p>	Project Manager	<p>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.</p> <p>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>).</p>
<p>Richard Deeney</p> <p>Advanced Diploma in Planning and Environmental Law, Kings Inns, Ireland 2017</p> <p>B.Sc. First Class Honours Degree, Environmental Management, Dublin Institute of Technology, 2012</p> <p>Chartered Environmentalist, The Society for the Environment</p>	SEA Team Lead	<p>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 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.</p>



Name and Qualifications	Project Role	Relevant Experience
		She also has experience developing baseline emission inventories and conducting baseline environmental assessments for multiple projects.
Eibhlín Vaughan First Class Honors BA in Environmental Science, Trinity College Dublin ,2020	Project Support	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. 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.

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 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.

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.



Information Required	Relevant Section of the SEA Environmental Report
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 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 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.

3.5 SEA Statement

The final LACAP will be published by February 2024 at the latest. KCC will publish a post adoption SEA Statement alongside the final Plan. 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 plan-making process. It will summarize 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 plan-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 & 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 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/SEA_Spatial_Information_Sources)



Legend

 Local Authority Boundaries

Local Authority Boundary

KILDARE COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.1

CLIENT: KILDARE COUNTY COUNCIL

DATE: 15/08/2023

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4.2 Population and Human Health

4.2.1 Characterisation of the Environmental Baseline

In the 2022 Census, the total population of Kildare was 247,774 persons, showing the trend of an increase in total population in the County by ca. 11.4% (25,270 persons)¹⁴ since the previous Census.

Kildare is identified by the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) 2019-2031 as being part of the Mid-East Region. The transitional population projection for the Dublin Metropolitan Area until 2031 is 813,500 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.
- 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.

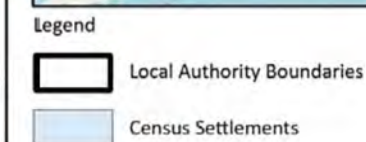
4.2.2 Key Issues Relating to the LACAP

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.
- 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)
<https://data.cso.ie/table/FY003B>

¹⁵ *Regional Spatial and Economic Strategy for the Eastern & Midland Region 2019-2031*



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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 Kildare including:

Table 4-1: Designated Ecological Sites and Protected Species

Environmental Features	Description
Special Areas of Conservation ¹⁶ (SACs) ¹⁷	Designated under the Habitats Directive (Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). There are 7 designated SACs within, partially within or adjacent to the County, including: Ballynafagh Bog SAC (000391), Ballynafagh Lake SAC (001387), Mouds Bog SAC (002331), Pollardstown Fen SAC (000396), Red Bog, Kildare SAC (000397), River Barrow and River Nore SAC (002162), Rye Water Valley/Carlton SAC (001398). These and other sites beyond the County border that could be affected by the LACAP has been considered by the assessments.
Special Protection Areas ¹⁸ (SPAs) ¹⁹	Designated under the Birds Directive (EC Directive 200/147/EC on the conservation of wild birds). There is one designated SPAs within, partially within or adjacent to the County, including: Poulaphouca Reservoir SPA (004063). These and other sites beyond the County border that could be affected by the LACAP has been considered by the assessments.
RAMSAR sites ²⁰	The Convention of Wetlands of International Importance, especially as Waterfowl 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. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares. There is one designated Ramsar site adjacent to the County boundary; Pollardstown Fen.
Natural Heritage Areas ²¹ (NHAs)	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

¹⁶ [Designated site data | National Parks & Wildlife Service \(npws.ie\)](#)

¹⁷ [Habitats Directive \(1992/43/EEC\) - habitats and species listed in Annex I and II](#)

¹⁸ [Designated site data | National Parks & Wildlife Service \(npws.ie\)](#)

¹⁹ [Birds Directive \(2009/147/EEC\)](#)

²⁰ [Ramsar Sites - Datasets - data.gov.ie](#)

²¹ [Natural Heritage Areas \(NHA\) | National Parks & Wildlife Service \(npws.ie\)](#)



Environmental Features	Description
	the Wildlife (Amendment) Act 2000. There are 2 designated NHAs within, partially within or adjacent to the County including: Carbury Bog NHA (001388), Hodgestown Bog NHA (001393).
Proposed Natural Heritage Areas (pNHAs) ²²	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 7 pNHAs within or partially within the County, including: Ballina Bog, Ballynafage Bog, Ballynafage Lake, Barrow Valley at Tankardstown Bridge, Carbury Bog, Corballis Hill, Curragh, Derryvullagh Island, Donadea Wood, Dunlavin Marshes, Grand Canal, Hodgestown bog, Kilteel Wood, Liffey at Osberstown, Liffey Bank above Athgarvan, Liffey Valley Meander Belt, Mouds Bog, Oakpark, Pollardstown Fen, Pollaphouca Reservoir, Red Bog, Royal Canal, Rye Water Valley
Tree Preservation Order (TPO)	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.
Flora Protection Order Sites ²³	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 2 designated Flora Protection Order Sites in the County; Kingsbog and Leixlip.
Wildfowl Sanctuaries ²⁴ (See S.I. 192 of 1979)	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. The nearest Wildfowl Sanctuary to the County is (WFS-30) Ballynafagh Lake (Blackwood Lake).
Salmonid Waters ²⁵	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>). The River Boyne in the north of the county and the River Slaney in the south of the county are listed under the regulation.
OSPAR Marine Protected Areas ²⁶ (MPA)	There are currently 19 OSPAR sites proposed in the State. County Kildare is located inland, therefore, is not close to any MPA.
CORINE Landcover ²⁷	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

²² [EPA Maps](#)

²³ [Flora Protection Order Map Viewer \(npws.ie\)](#)

²⁴ [Wildfowl Sanctuaries | National Parks & Wildlife Service \(npws.ie\)](#)

²⁵ [Register of Protected Areas - Salmonid Water Regs Table - Datasets - data.gov.ie](#)

²⁶ [EPA Maps](#)

²⁷ [EPA Maps](#)



Environmental Features	Description
	human constructions which cover the earth's surface. The most dominant land cover types are agricultural pastures and urban areas.
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 the county.
Nature Reserves ²⁸	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 is one Nature Reserve, at Pollardstown Fen Nature Reserve.

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 steppingstones and corridors)	Riparian habitats, hedgerows and other blue and green infrastructure networks. Ecological connectivity and networks is 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 NPWS, 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 follows 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.

²⁸ [Nature Reserves in Ireland | National Parks & Wildlife Service \(npws.ie\)](http://www.npws.ie)



As well as considerations related to European sites - a focus was placed on protected species outside of these designations such as bats²⁹, breeding birds³⁰, badgers³¹ etc. as well as all related species listed within the Flora (Protection) Order, 2022 ([S.I. No. 235 of 2022](#))³².

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.
- The potential for biodiversity enhancement.

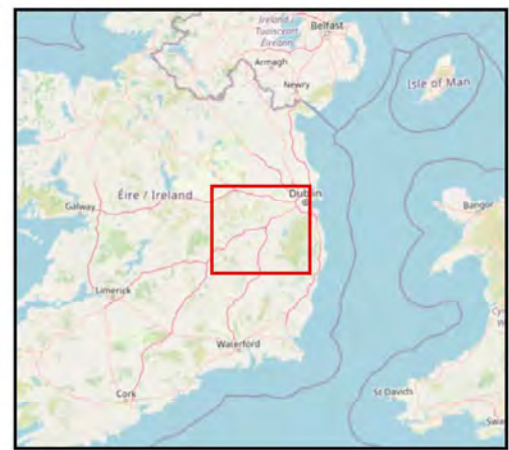
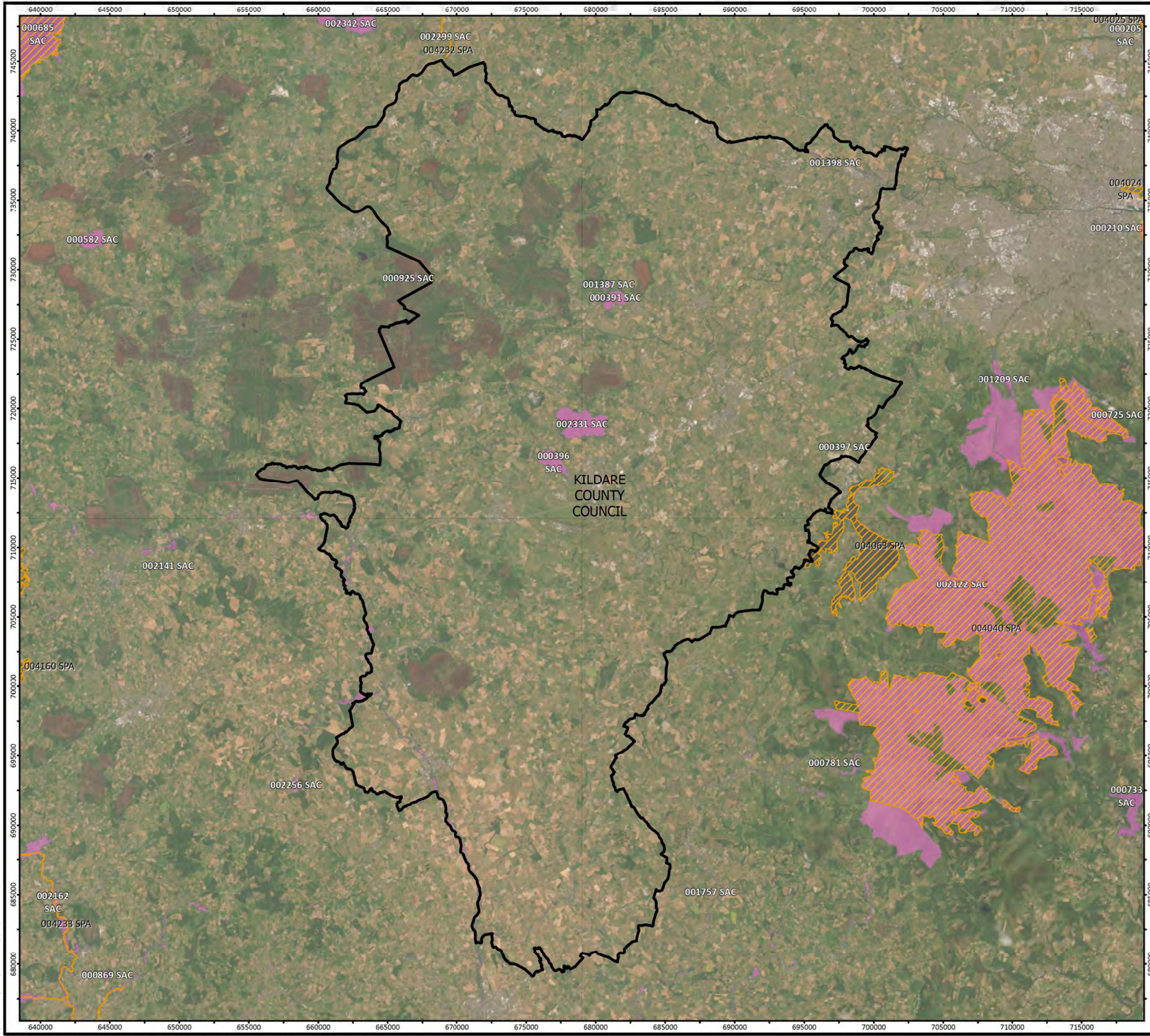
²⁹ The Habitats Directive ([1992/43/EEC](#)) and Birds Directive ([2009/147/EEC](#)) provides legal protection for habitats and species of European importance. The overall aim of the Habitat and Birds Directives are to maintain or restore the “favourable conservation status” of habitats and species of 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.

³⁰ Irish Wildlife Acts, 1976 (as amended).

³¹ Irish Wildlife Act 1976 (as amended) and Bern Convention Appendix III.



³² 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).

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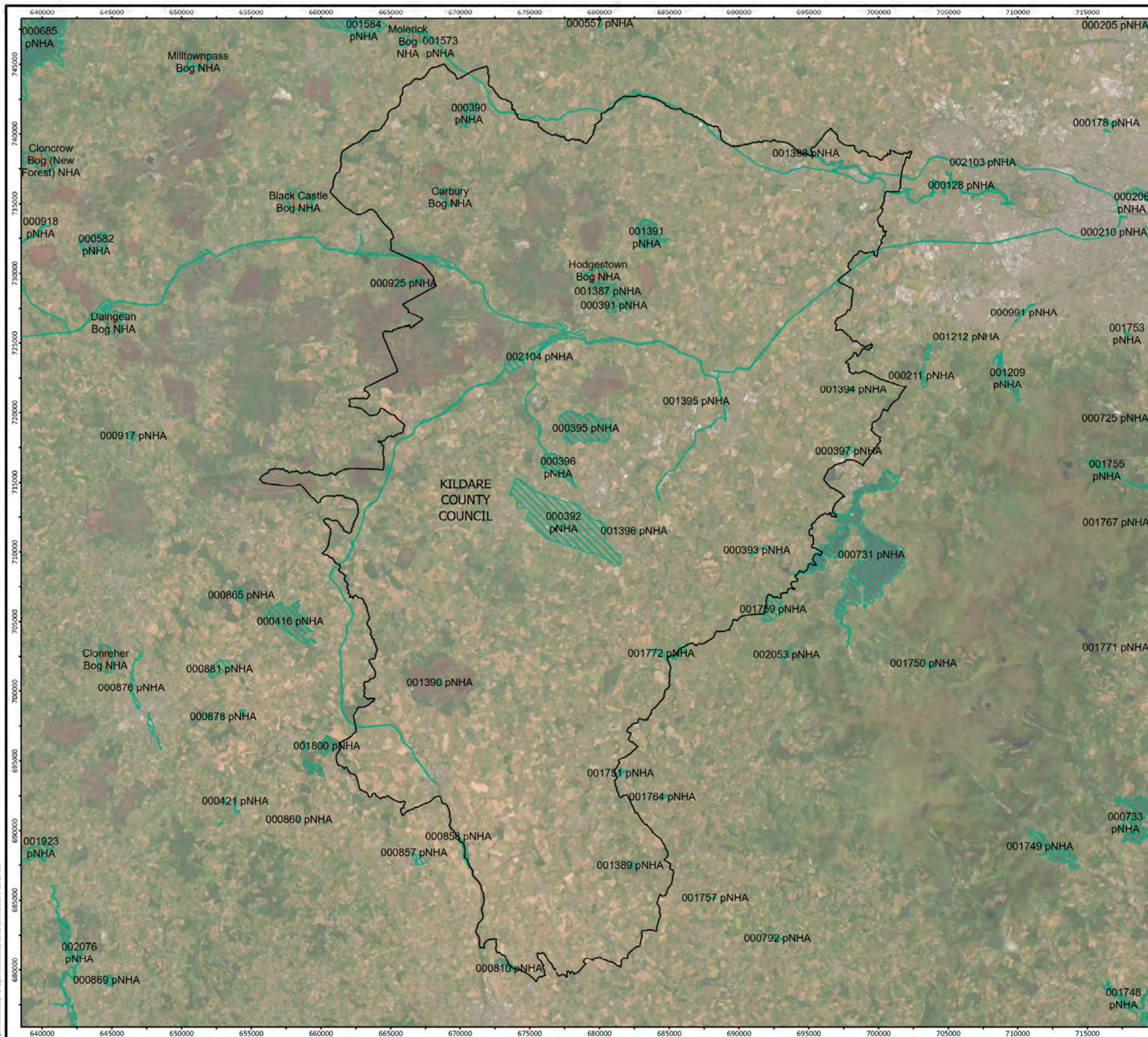
Legend

- Local Authority Boundaries
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)



Special Areas of Conservation and Special Protected Areas	
KILDARE COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.3
CLIENT: KILDARE COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:270,000 @ A3
 	

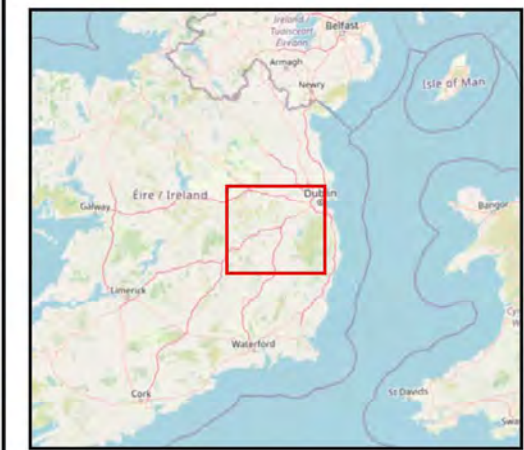
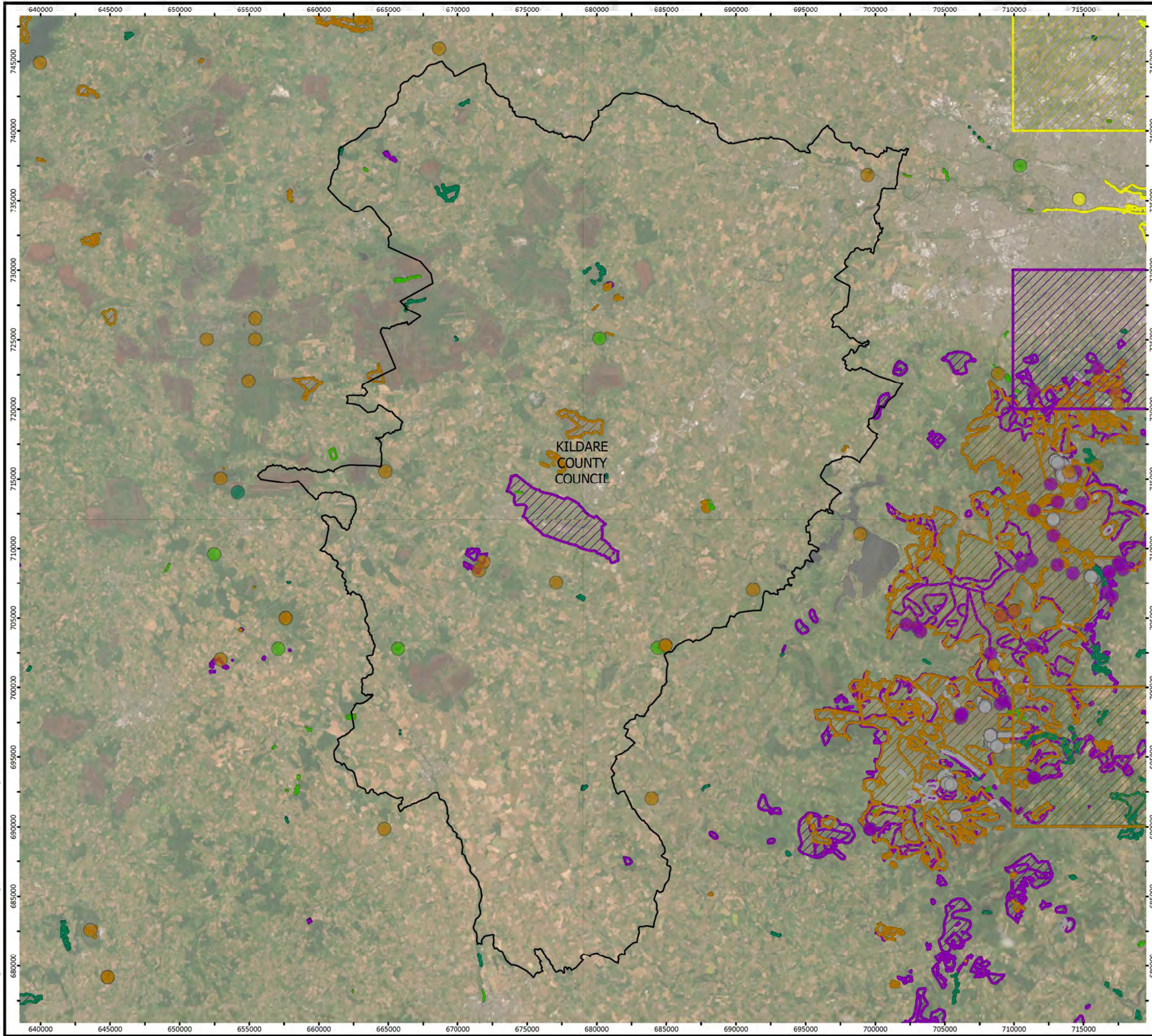


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- Legend
- Local Authority Boundaries
 - Natural Heritage Areas
 - Proposed Natural Heritage Areas

Natural Heritage Areas and proposed Natural Heritage Areas in Ireland	
KILDARE COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.4
CLIENT:	KILDARE COUNTY COUNCIL
DATE:	20/09/2023
SCALE:	1:270,000 @ A3
 	



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

Potential Habitat Sensitivities - Areas likely to contain Annex I habitats

KILDARE COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.5

CLIENT: KILDARE COUNTY COUNCIL

DATE: 15/08/2023 SCALE: 1:270,000 @ A3

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4.4 Landscape & Visual Amenity

4.4.1 Characterisation of the Environmental Baseline

Kildare is an inland county situated in the east-central part of Ireland. The Wicklow Mountains run along the east of the county. The county is mostly fertile arable land with many streams and river flowing through the Plan area. The Landscape Character Assessment in 2004³³ for Kildare divides the County into 16 Landscape Character Areas. In addition to this, Specific Views and Prospects for protection have been identified. High Amenity Areas have also been identified in the County. These comprise of:

Table 4-3: Landscape Character Areas and High Amenity Areas

Environmental Features	Description
Landscape Character Areas (LCAs)	<ul style="list-style-type: none"> • Mouds Bog • Central Undulating Lands • Dún Ailinne • Chair of Kildare • Eastern Transition • Eastern Uplands • North-western Lowlands • Northern Hills • Northern Lowlands • Pollardstown Fen • River Barrow • River Liffey • South-eastern Uplands • Southern Lowlands • The Curragh • Western Boglands
High Amenity Areas	<ul style="list-style-type: none"> • Dun Ailinne • The Curragh and Environs • Pollardstown Fen • The River Liffey and the River Barrow Valleys • Rye Water Valley at Carton SAC • The Grand and Royal Canal Corridors • Ballynafagh Lake SAC • Poulaphouca Reservoir SPA • Mouds Bog SAC • Ballynafagh Bog SAC • Red Bog SAC • East Kildare Uplands

³³ Kildare County Development Plan 2023-2029, Chapter 13: Landscape, Recreation & Amenity



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

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

- Kildare environmental sensitivity mapping.
- The National Landscape Strategy for Ireland.
- Tree Preservation Orders.
- Forest cover/Indicative Forest Strategies³⁴.
- Kildare County Development Plan.
- County Landscape Character Assessment.

4.4.2 Key Issues Relating to the LACAP

The key issues in relation to Landscape 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.
- Sensitivity of the landscape to change from green infrastructure development.

4.5 Cultural Heritage - Archaeology & Architectural

4.5.1 Characterisation of the Environmental Baseline

Archaeological sites are legally protected³⁵. The SEA Environmental Report includes information on the archaeological heritage of Kildare. One of the primary sources of information for known archaeological features is the Record of Monuments and Places (RMP)³⁶. The RMP is an inventory of sites and areas of archaeological significance.

There are hundreds of Recorded Monuments within the County³⁷. These monuments are found throughout the County with clusters found in towns and lower concentrations found in peatland areas. Castles, Churches, Ringforts and Grave Yards are amongst the most common recorded monuments. The locations of the known archaeological sites have been detailed as required.

The SEA Environmental Report also includes information on the architectural heritage of Kildare including that relating to designations such as the Record of Protected Structures (RPS). The local authority compiles and maintains the RPS³⁸; this RPS is listed in the County Development Plan in Appendix 6. There are over 1,000 entries to the Record of Protected Structures within the County³⁹.

³⁴ Department of Agriculture, Food and the Marine

³⁵ National Monuments Acts 1930 (as amended), the National Cultural Institutions Act 1997 (as amended) and the Planning and Development Act 2000 (as amended)

³⁶ 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)

³⁷ Kildare County Development Plan 2023-2029 – *Appendix 5*.

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

³⁹ Kildare County Development Plan 2023-2029 – *Appendix 6*.



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 the 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 County.

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
- Kildare County Development Plan.
- Heritage Council.
- United Nations Educational, Scientific and Cultural Organization (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.
- No existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

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/dataset/national-inventory-of-architectural-heritage-niah-national-dataset)

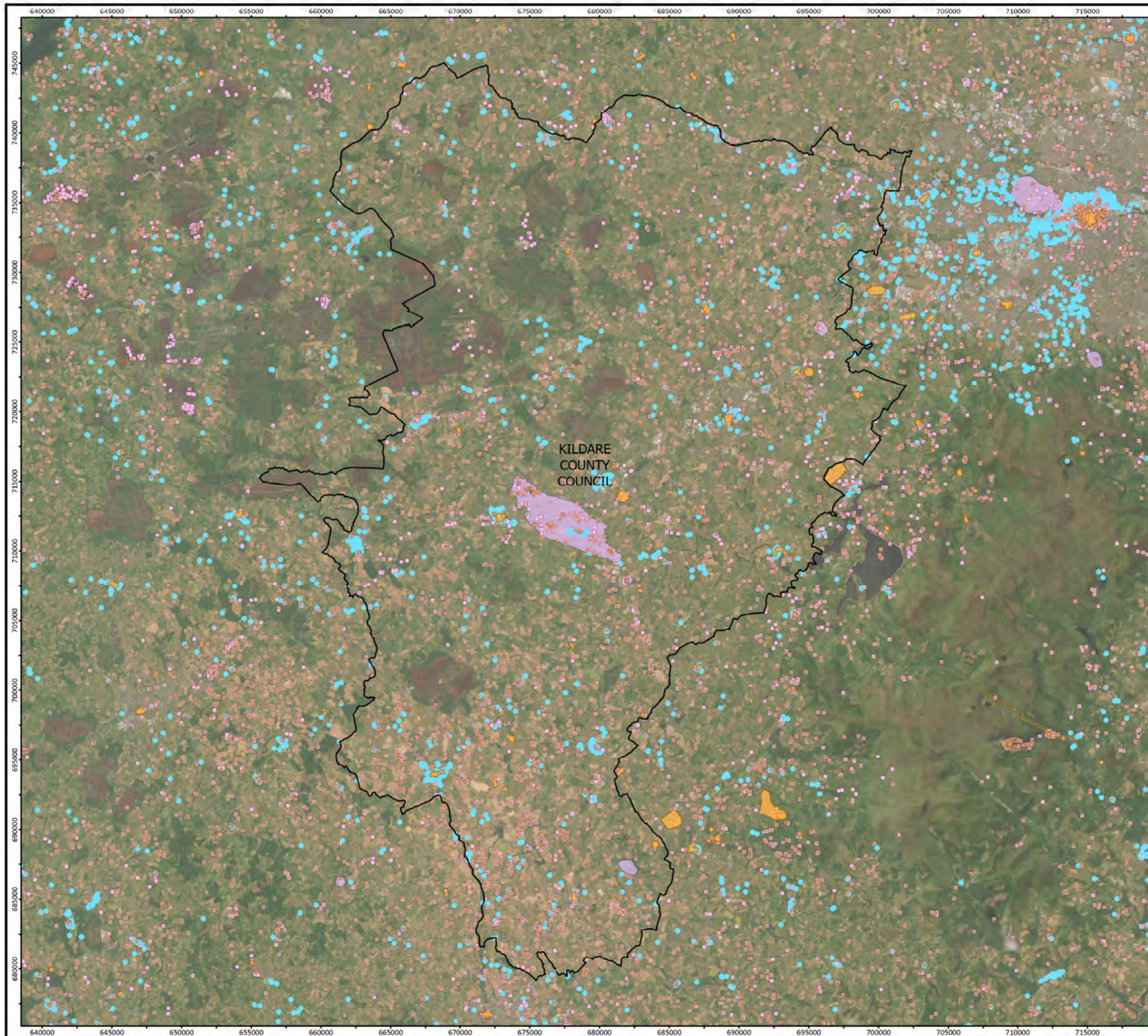
⁴¹ Department of Housing, Local Government and Heritage. 2015. Advice to the Public on Ireland's Underwater Archaeological Heritage

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

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-niah-national-dataset)



Legend

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

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

Archaeological Heritage and National Monuments Map

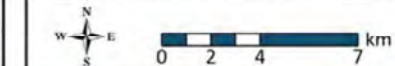
KILDARE COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.6

CLIENT: KILDARE COUNTY COUNCIL

DATE: 20/09/2023

SCALE: 1:270,000 @ A3





4.6 Soils

4.6.1 Characterisation of the Environmental Baseline

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

Table 4-4: Soil Types Covering the County

Soil Type	Description
Dominant Soils	
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 most built-up parts of the County.
Grey-Brown Podzolics	Grey-Brown podzolic soils are characterized by a comparatively thin organic covering and an organic-mineral layer above a grayish brown leached layer. These soils underlie most areas of the County.
Gleys	Gleys are soils showing the effects of poor drainage and have developed as a result of permanent or intermittent water logging. This may be due to a high-water table, to a 'perched' water table caused by the impervious nature of the soil itself, or to seepage of runoff from slopes. Most gleys have poor physical conditions, resulting in restricted growth in spring and autumn. These soils stretch across the central areas to the east of the County.
Other Soils	
Alluvial soils	These are associated with alluvial (clay, silt or sand) river deposits. These are found in the flood plains of rivers and streams.
Brown Earths	Brown earths are well drained mineral soils, associated with high levels of natural fertility. These are found mainly as subsoil in the east and south-east of the County.

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. Basin peats have been identified in the west of the County.

The SEA examines 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.

The audit of County Geological Sites in Kildare was completed in 2005 and identified 22 County Geological Sites⁴⁷. Previous Landslide Events and Landslide Susceptibility Mapping sources has been considered by the SEA.

⁴⁶ Teagasc.ie. General Soil Map.

⁴⁷ Geological Survey of Ireland (2005) *The Geological Heritage of Kildare*.



The SEA of Soils has utilised information from the following sources:

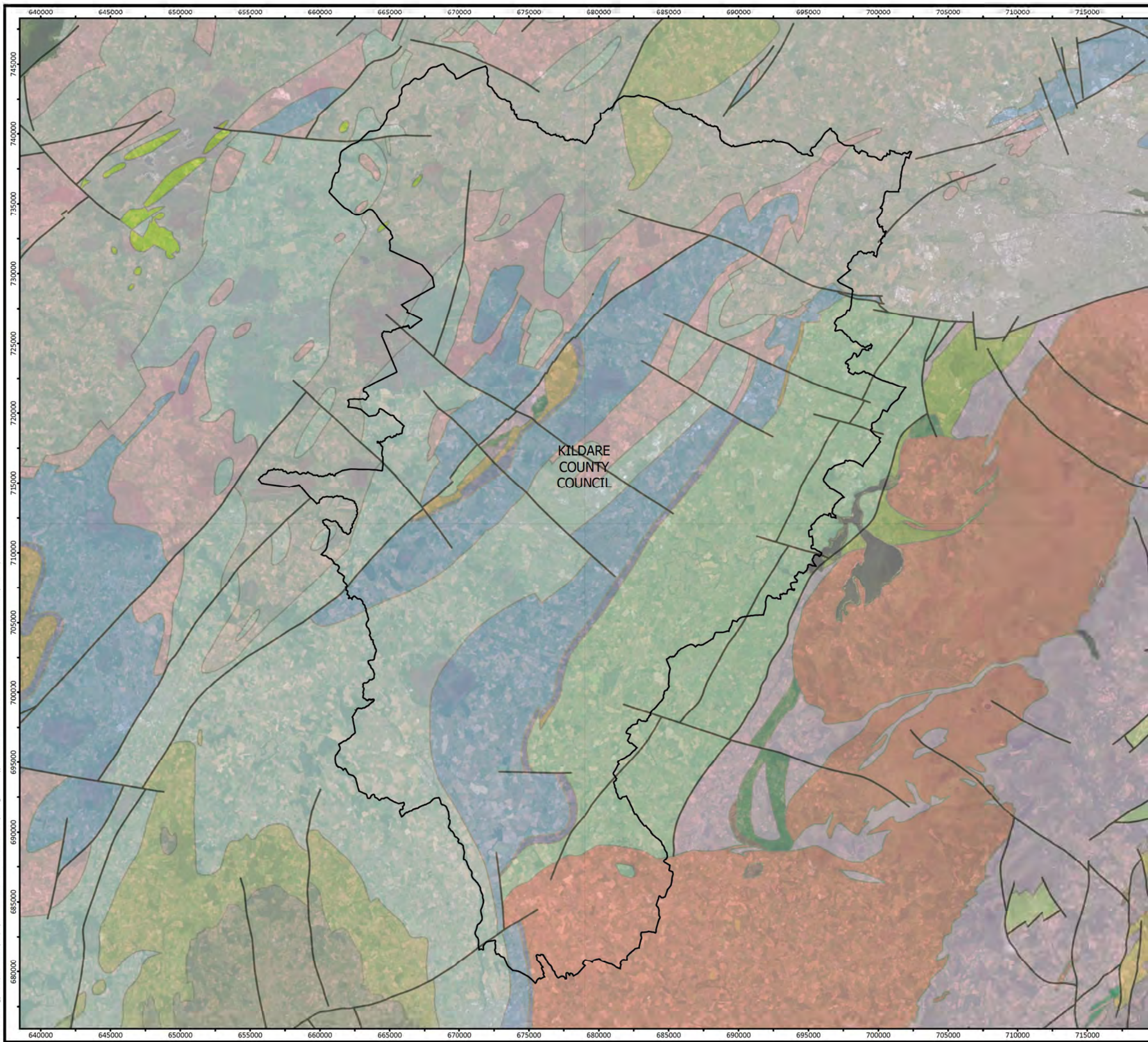
- Geological Survey Ireland (GSI)
- Teagasc
- EPA

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

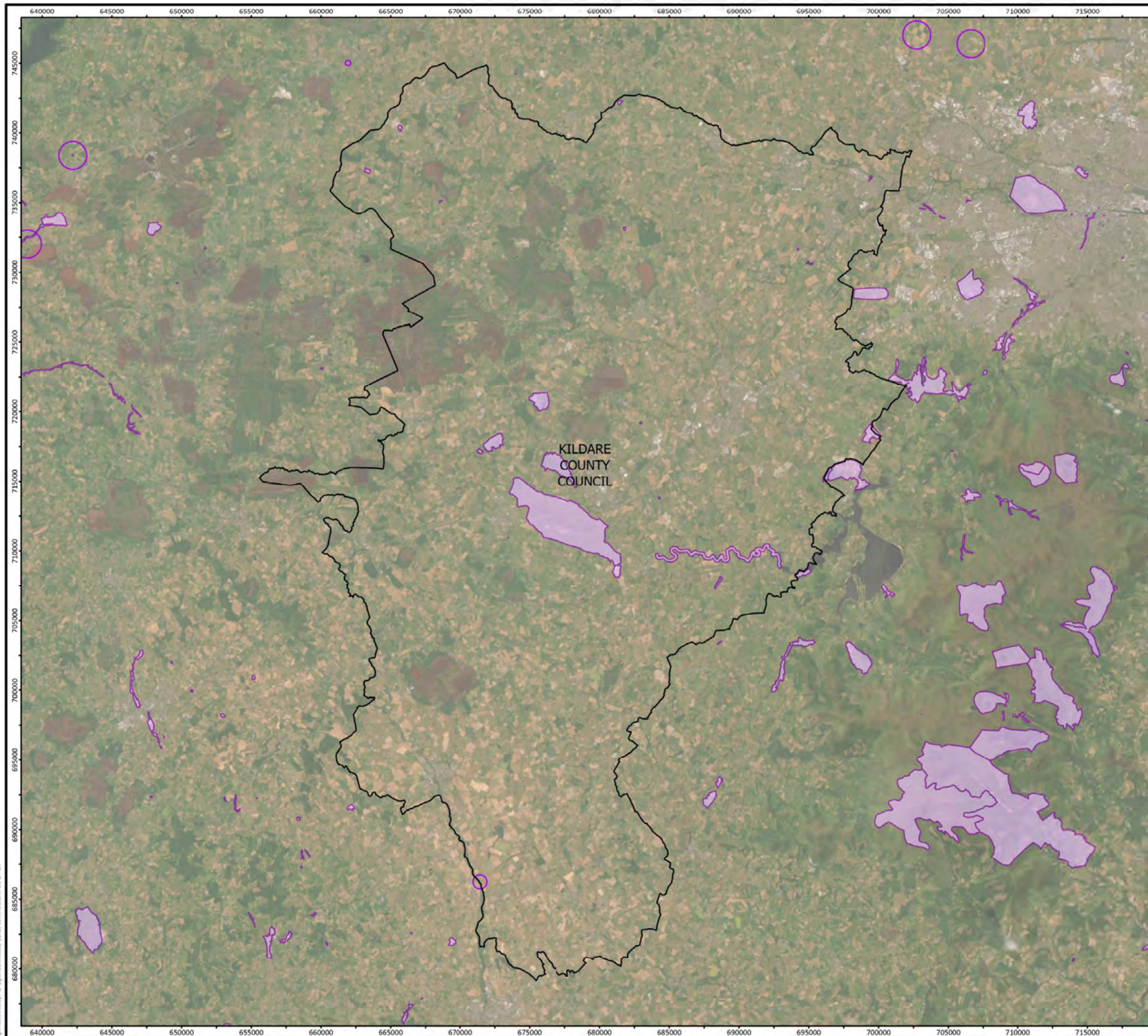
The key issues in relation to Soils were as follows:

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



Legend	
	Local Authority Boundaries
Bedrock Geology 500k (ROI/Ni)	
	7, Appinite Suite
	8, Granite, granodiorite
	33, Basalt - andesite, tuff & shale
	35, Deep marine; Slate, schist & minor greywacke
	36, Deep marine; Greywacke, shale, sandstone & conglomerate
	37, Basalt - andesite, tuff, slate & mudstone
	39, Deep marine; Slate, shale, minor sandstone & siltstone
	49, Deep marine turbidite sequence; Mudstone, greywacke & conglomerate
	54, Continental redbed facies; Sandstone, conglomerate & siltstone (in places extends into the Carboniferous)
	56, Basalt, trachyte, syenite & tuff
	58, Shallow marine ("Lower Limestone Shale"); Shale, sandstone & thin limestone
	61, Marine shelf & ramp facies; Argillaceous dark-grey bioclastic limestone, subsidiary shale
	62, Waulsortian mudbank; Pale-grey massive limestone
	64, Marine shelf facies; Limestone & calcareous shale
	65, Marine basinal facies (Tobercolleen & Lucan Fms - "Calp"); Dark-grey argillaceous & cherty limestone & shale
	71, Fluvio-deltaic & basinal marine (Turbiditic); Shale, sandstone, siltstone & coal
	72, Fluvio-deltaic & shallow marine; Shale, sandstone & siltstone with coal

Bedrock Geology	
KILDARE COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.7
CLIENT:	KILDARE COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:270,000 @ A3
 	



Legend

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

Geological Heritage Sites

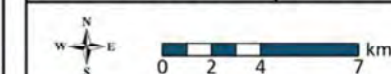
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FIGURE NO: 4.8

CLIENT: KILDARE COUNTY COUNCIL

DATE: 20/09/2023

SCALE: 1:270,000 @ A3



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4.7 Land Use

4.7.1 Characterisation of the Environmental Baseline

Information on land use in Kildare can be obtained from the CORINE Land Cover (CLC) inventory. 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 NPWS⁴⁸.

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

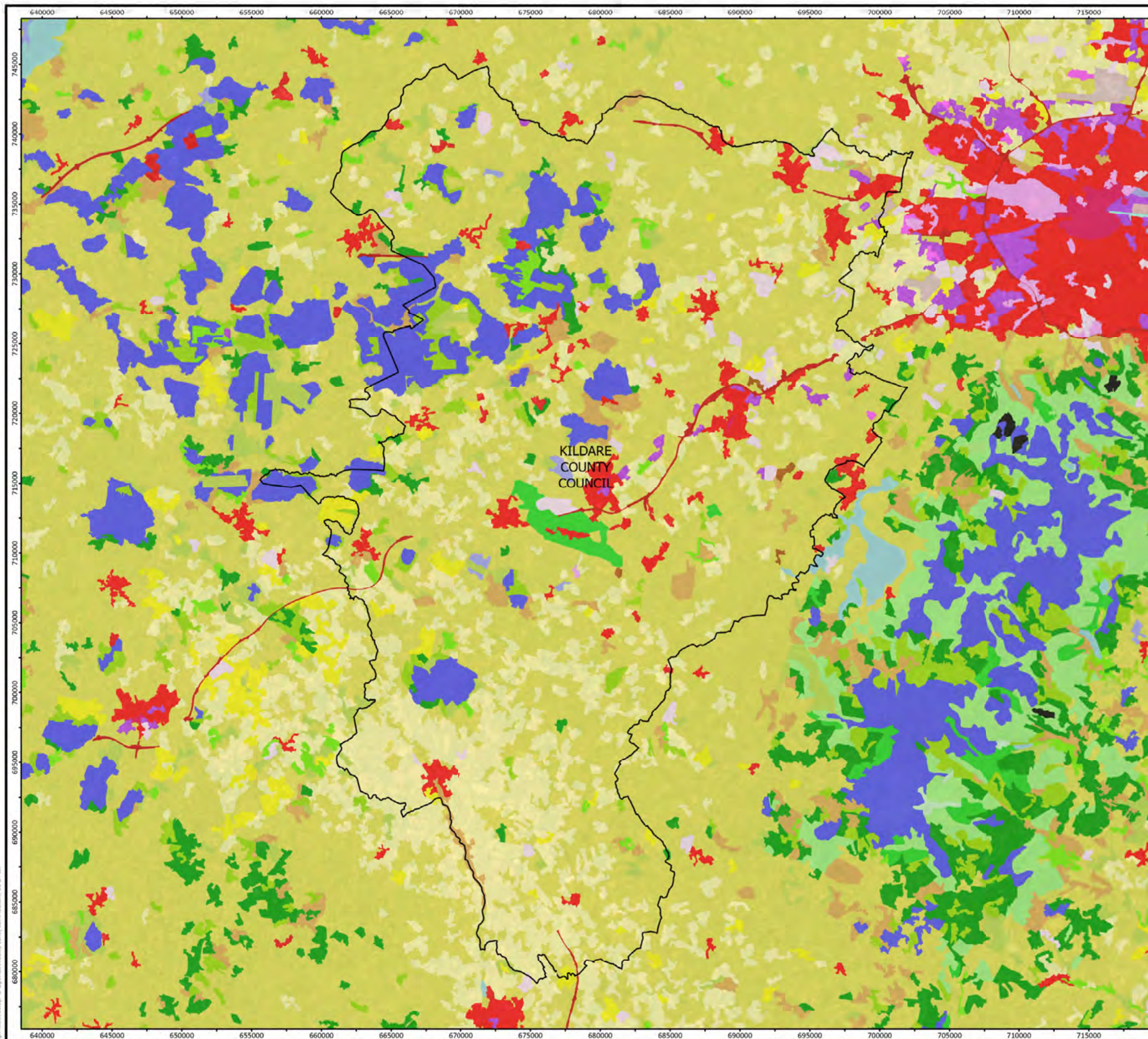
- CORINE Land Cover Database
- Teagasc
- EPA
- NPWS
- Forest Service
- Bord na Móna
- GSI data

4.7.2 Key Issues Relating to the LACAP

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

- Potential constraints on commercial activities, both during construction and operation of renewable energy infrastructure projects associated with the LACAP; and
- 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.

⁴⁸ 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.



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
- 123 Sea ports
- 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
- 333 Sparsely vegetated areas
- 334 Burnt areas
- 411 Inland marshes
- 412 Peat bogs
- 423 Intertidal flats
- 512 Water bodies
- 522 Estuaries

Land Use (CORINE)

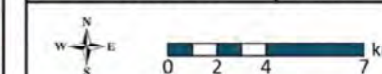
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FIGURE NO: 4.9

CLIENT: KILDARE COUNTY COUNCIL

DATE: 20/09/2023

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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) guidelines⁴⁹.

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). The current air quality in Kildare is identified by the EPA as being of Good⁵⁰ status.

The EEA⁵¹ 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 noise⁵². 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

⁴⁹ World Health Organization. 2021.WHO global air quality guidelines: particulate matter (PM2.5 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

⁵⁰ [EPA AirQuality.ie](https://airquality.ie) - 20/07/2023

⁵¹ EEA. 2022. Noise Data Briefing. Available at: [Noise — European Environment Agency \(europa.eu\)](https://noise.eea.europa.eu/).

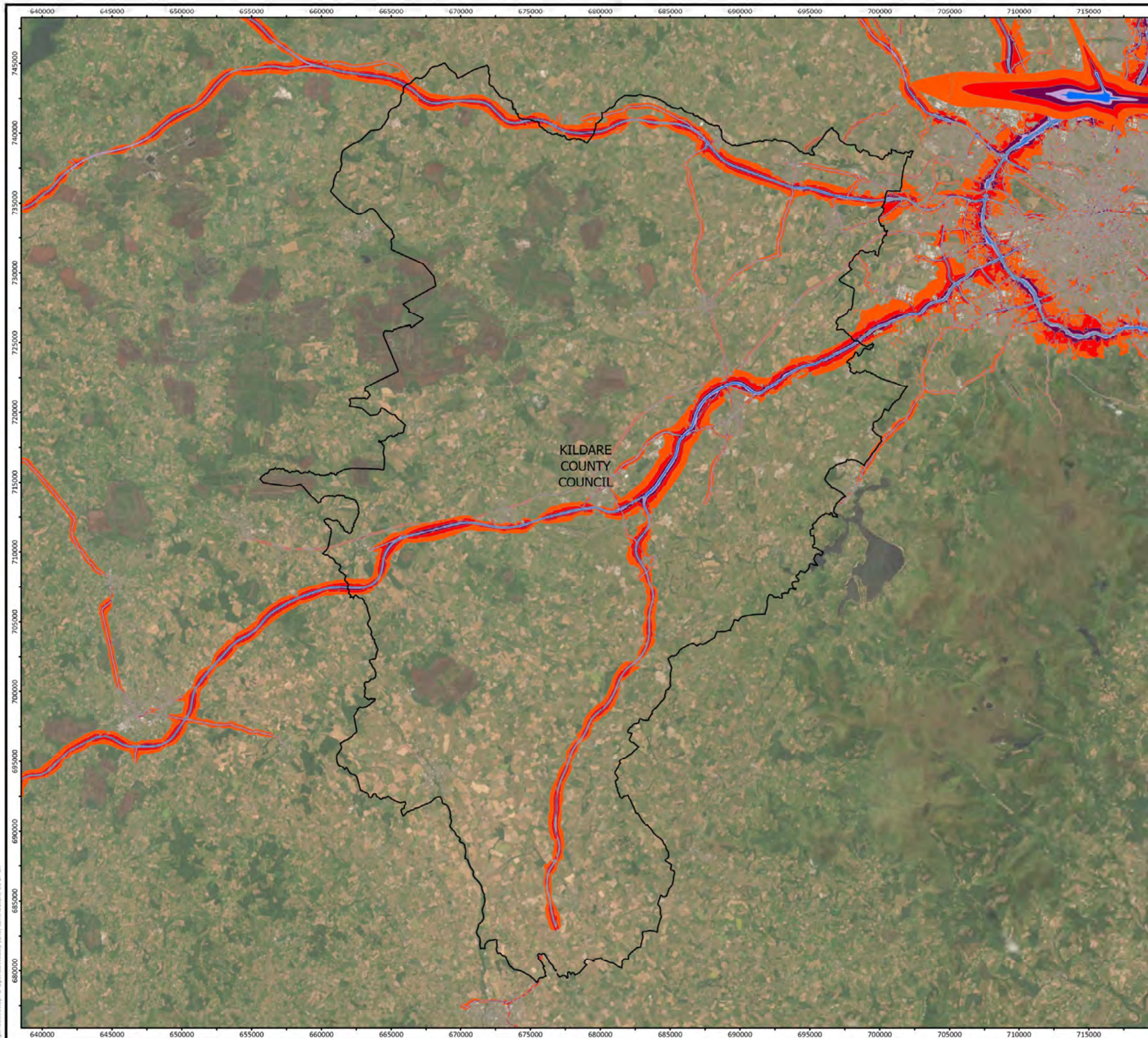
⁵² This was transposed into Irish national legislation via the Environmental Noise Regulations (S. I. No. 140 of 2006).



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

Noise Mapping Lden (Day, Evening, Night; a measurement over 24 hours)

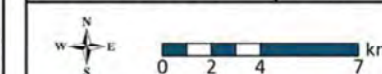
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FIGURE NO: 4.10

CLIENT: KILDARE COUNTY COUNCIL

DATE: 20/09/2023

SCALE: 1:270,000 @ 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 EPA⁵³. Kildare is an inland county and doesn't have any coastlines. There are many rivers and lakes in the County. The County is located mainly within the Barrow, Liffey and Dublin Bay, and Boyne catchments.

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 Kildare is generally identified as being of Good status.

The WFD status of rivers and streams (2016-2021) draining Kildare ranges from high (sections of rivers and streams, including sections of the Liffey), to good (sections of rivers and streams, including sections of the Liffey and Barrow), to moderate (sections of rivers and streams including: Kildoon and Cloncumber stream) and to poor (sections of rivers and streams including: Lyreen and Morell).

In addition, there are a number of unassigned lakes across the County.

Pressures on waterbodies that are failing to meet the WFD's overall objective of 'good' status have been identified by the SEA and policy responses have been recommended as necessary. The SEA also provides 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 and fluvial. There are various historic and predictive indicators of flood risk in the County, including along the Barrow River.

The OPW is the lead agency tasked with the management of flood risk in the Republic of Ireland. 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. 20 settlements were identified by the OPW in 2012 as requiring detailed assessment of flood risk (Areas for Further Assessment)⁵⁴.

⁵³ [EPA Maps](#). Water.

⁵⁴ Available online at [Microsoft Word - PFRA Main Report - Rev D.doc](#).



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:

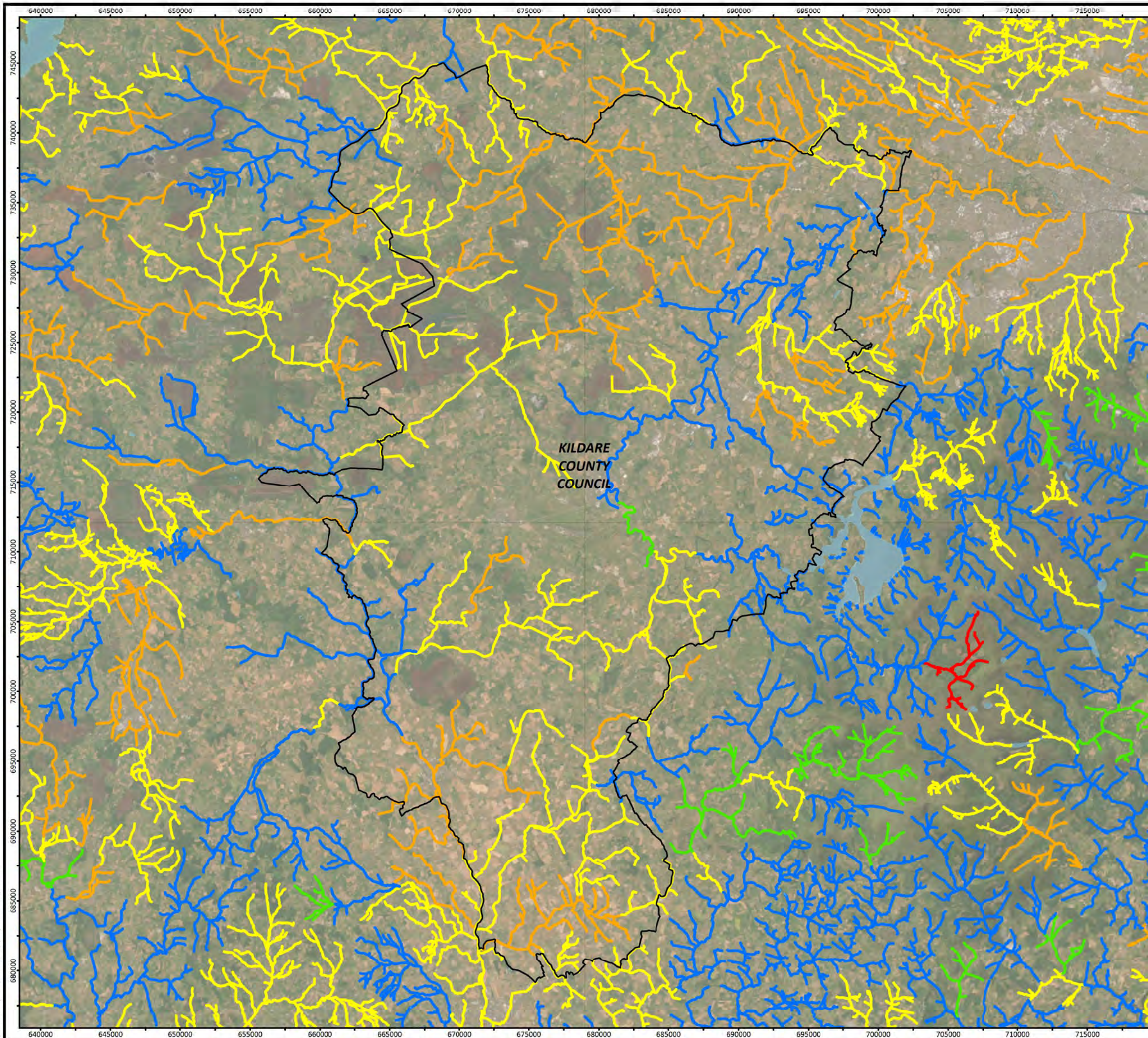
- EPA - WFD Data.
- GSI data on groundwaters, aquifers and bedrock information.
- Catchment Flood Risk Assessment and Management (CFRAM) Study and associated FRMPs (OPW, as reviewed 2022).
- Flood Risk Assessment (FRA) Mapping⁵⁵ (OPW).

4.9.2 Key Issues Relating to the LACAP

The key issues in relation to Water were as follows:

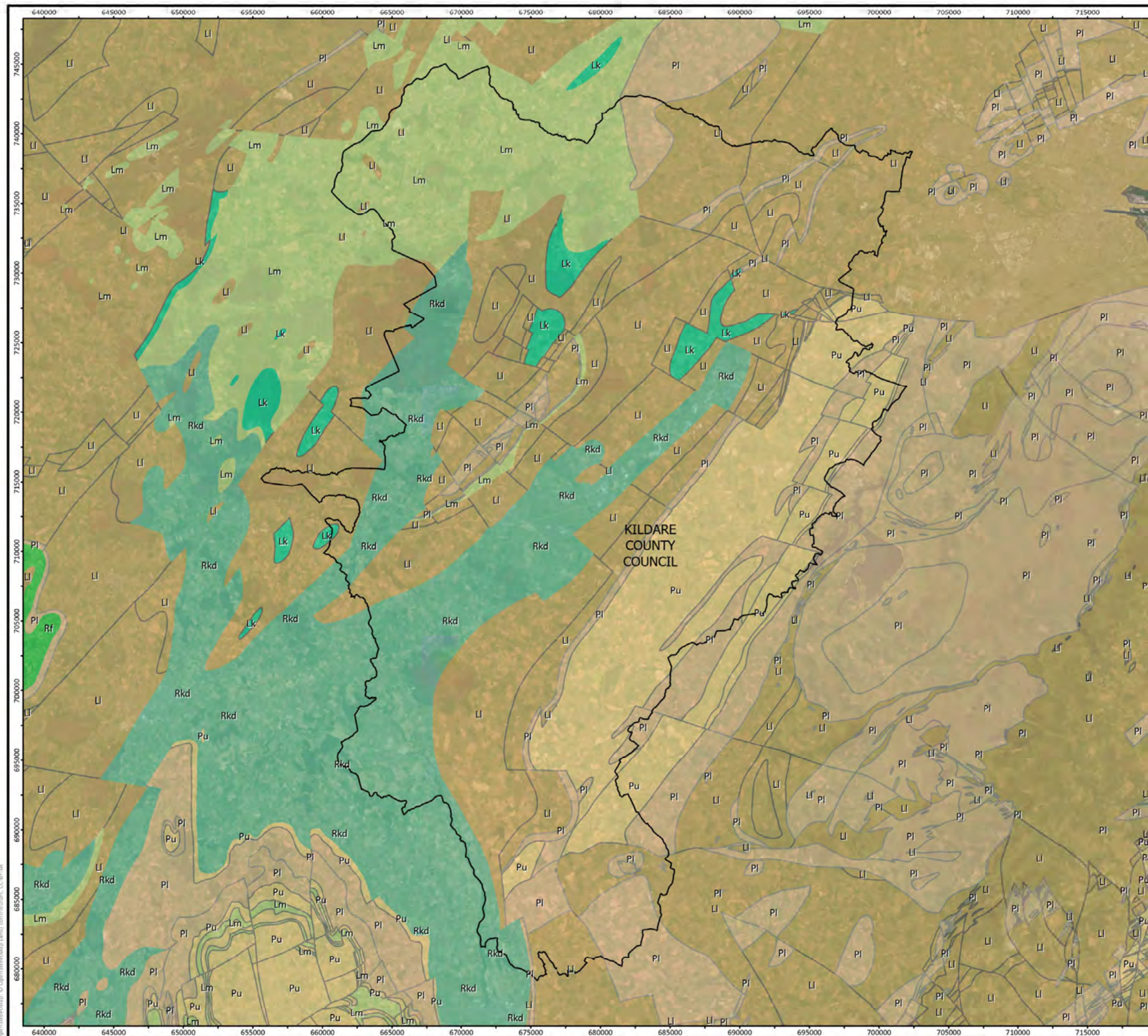
- Potential pressures and impacts on water body status from the construction of renewable energy and blueway projects i.e. increased sedimentation, groundwater recharge and accidental spillages.

⁵⁵ OPW (2022) Flood risk maps and data platform - Available at <https://www.floodinfo.ie/map/floodmaps/>



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

WFD Surface Water Status	
KILDARE COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.12
CLIENT:	KILDARE COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:270,000 @ A3



Legend

Local Authority Boundaries

Bedrock Aquifers

- Lk: Locally Important Aquifer - Karstified
- Li: 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

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Local Authority Climate Action Plans

FIGURE NO: 4.13

CLIENT: KILDARE COUNTY COUNCIL

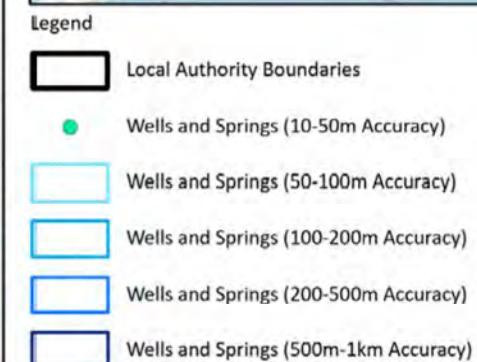
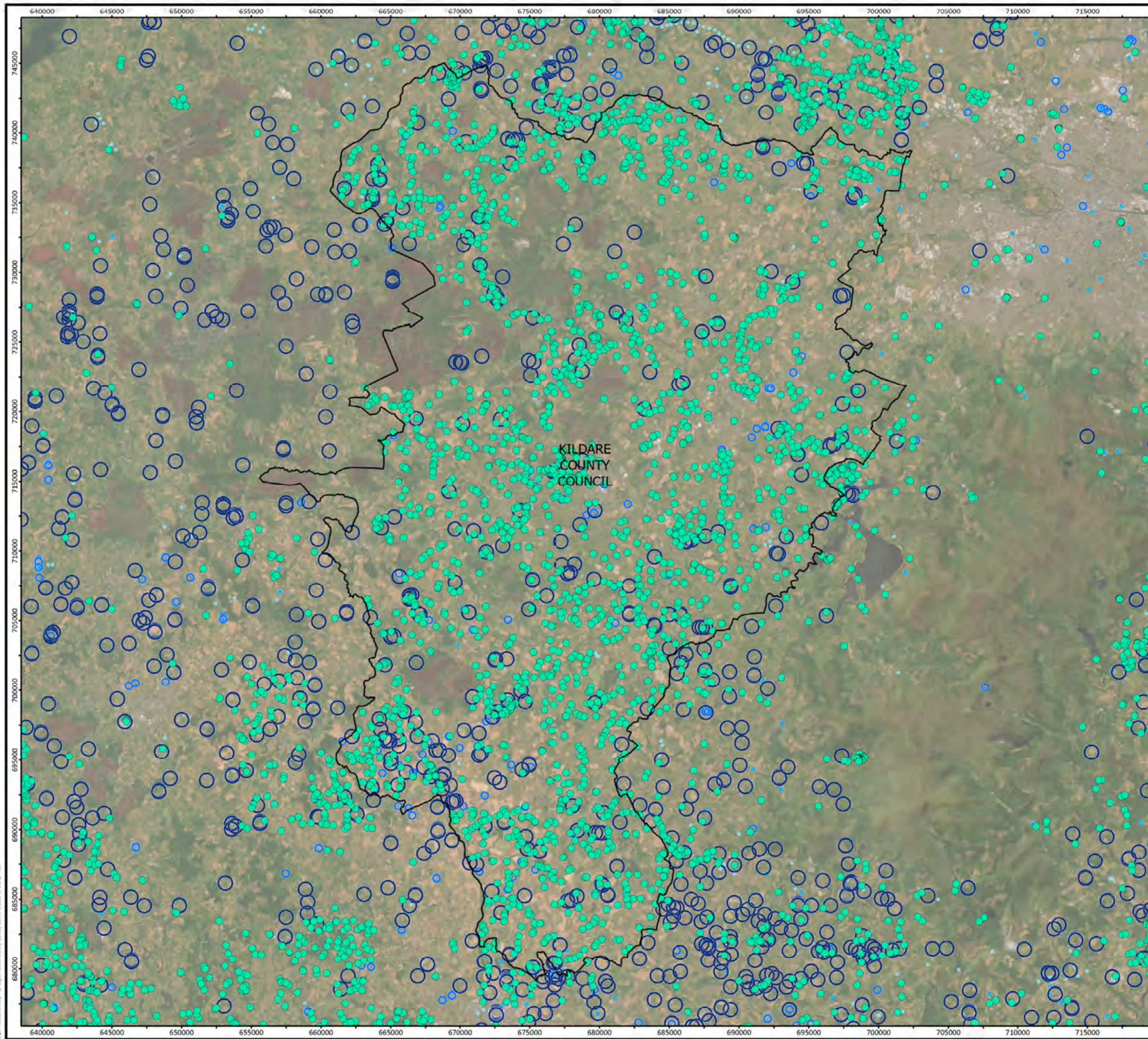
DATE: 20/09/2023

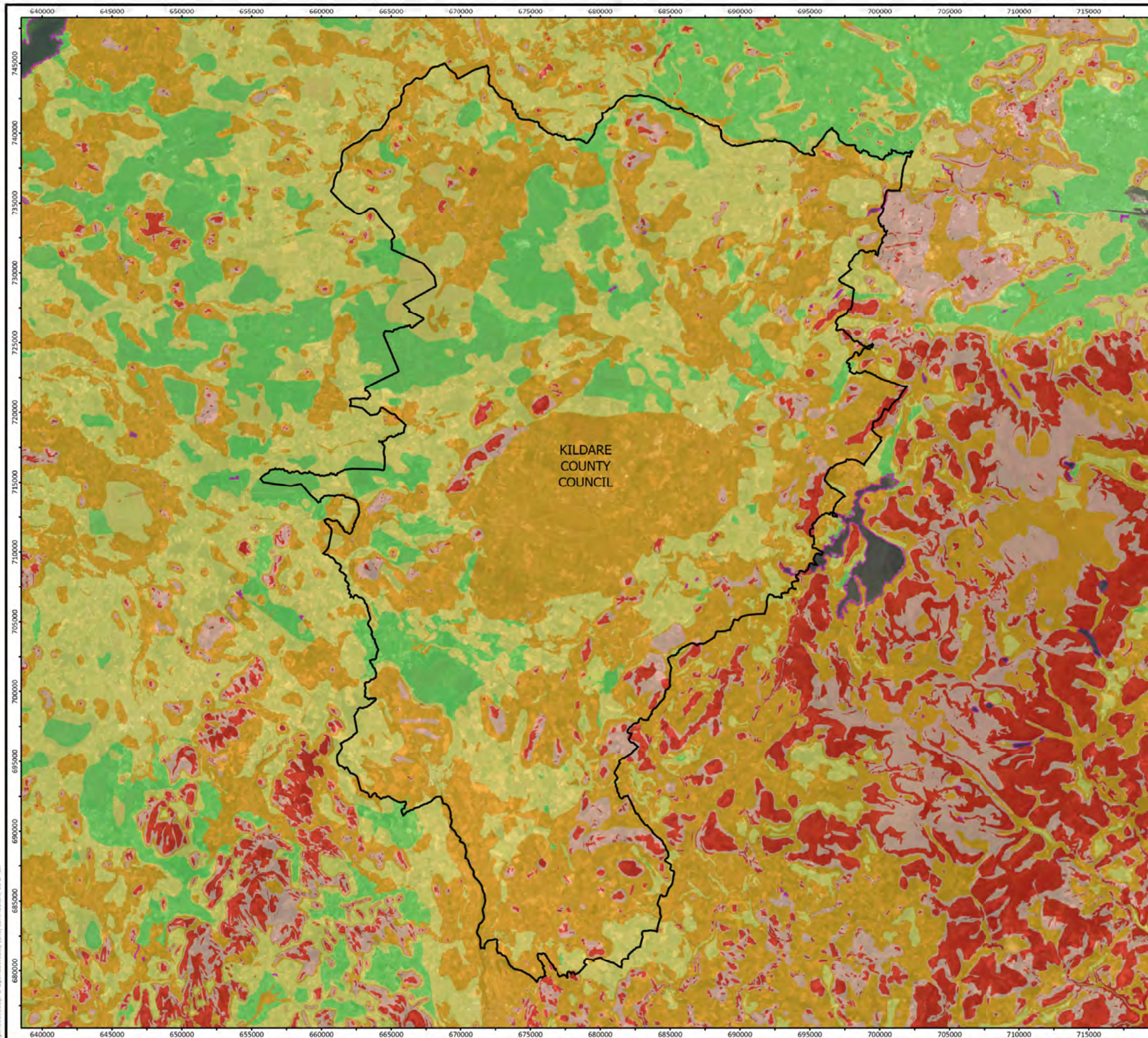
SCALE: 1:270,000 @ A3



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Legend

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

Groundwater Vulnerability	
KILDARE COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.15
CLIENT:	KILDARE COUNTY COUNCIL
DATE:	20/09/2023
SCALE:	1:270,000 @ A3



Legend

Local Authority Boundaries

Bedrock Aquifers

- Li: Locally Important Aquifer - Bedrock Mod Productive Locally
- Lm: Locally Important Aquifer - Bedrock Generally Mod Productive
- Pu: Poor Aquifer Bedrock Generally Unproductive

Groundwater Productivity

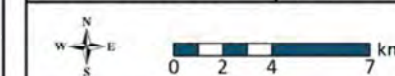
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Local Authority Climate Action Plans

FIGURE NO: 4.16

CLIENT: KILDARE COUNTY COUNCIL

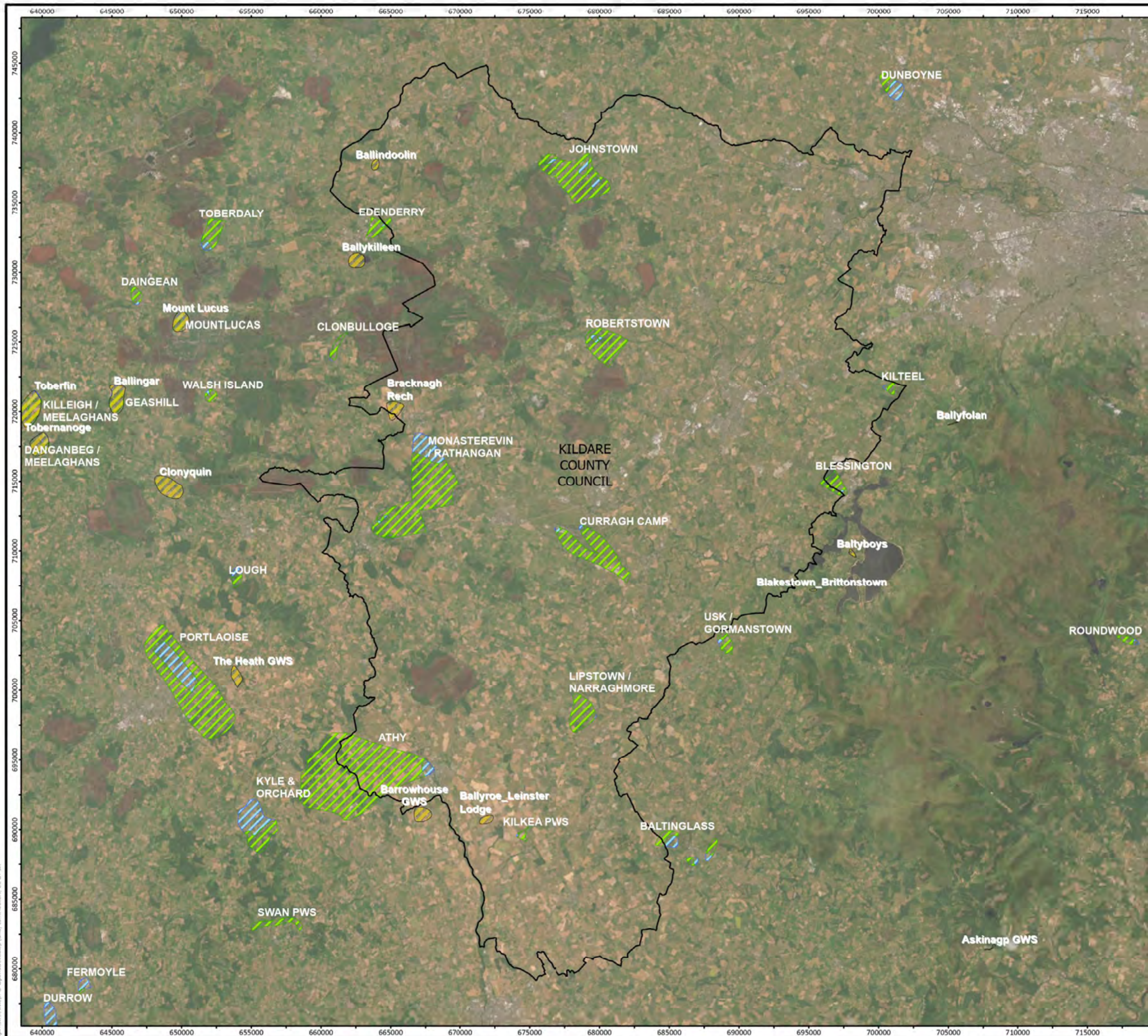
DATE: 20/09/2023

SCALE: 1:270,000 @ A3





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- 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	
KILDARE COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.17
CLIENT:	KILDARE COUNTY COUNCIL
DATE:	20/09/2023
SCALE:	1:270,000 @ A3
 	



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

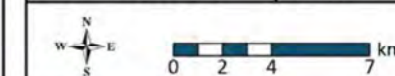
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Local Authority Climate Action Plans

FIGURE NO: 4.18a

CLIENT: KILDARE COUNTY COUNCIL

DATE: 20/09/2023

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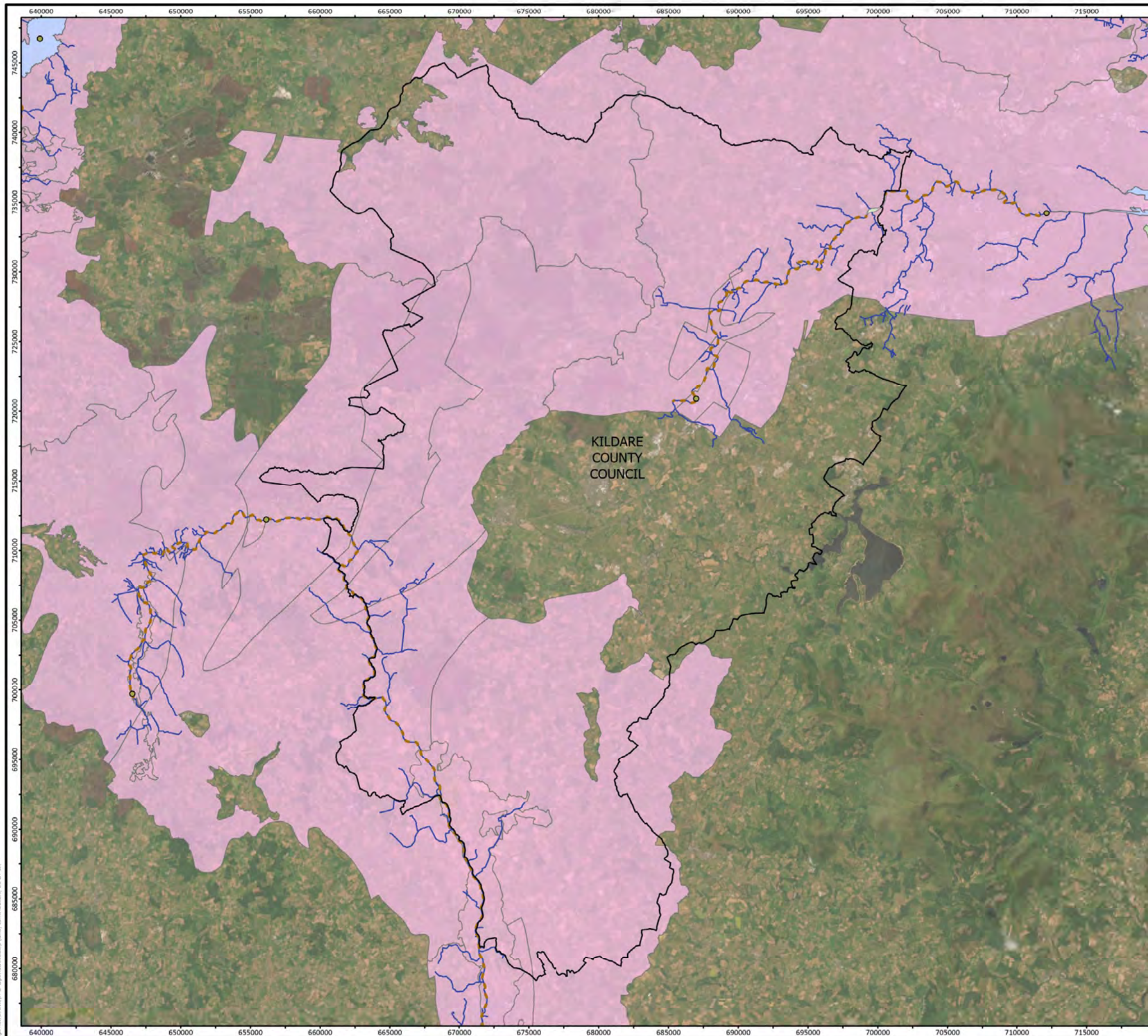


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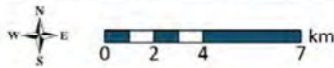
- Local Authority Boundaries
- Officially designated under S.I. 293/1988
- WFD Groundwater Bodies that intersect with Designated Salmonid Waters
- WFD Groundwater Bodies that intersect with Designated Salmonid Waters
- WFD Surface Water Polygons that intersect with Designated Salmonid Waters (Lake, Coastal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

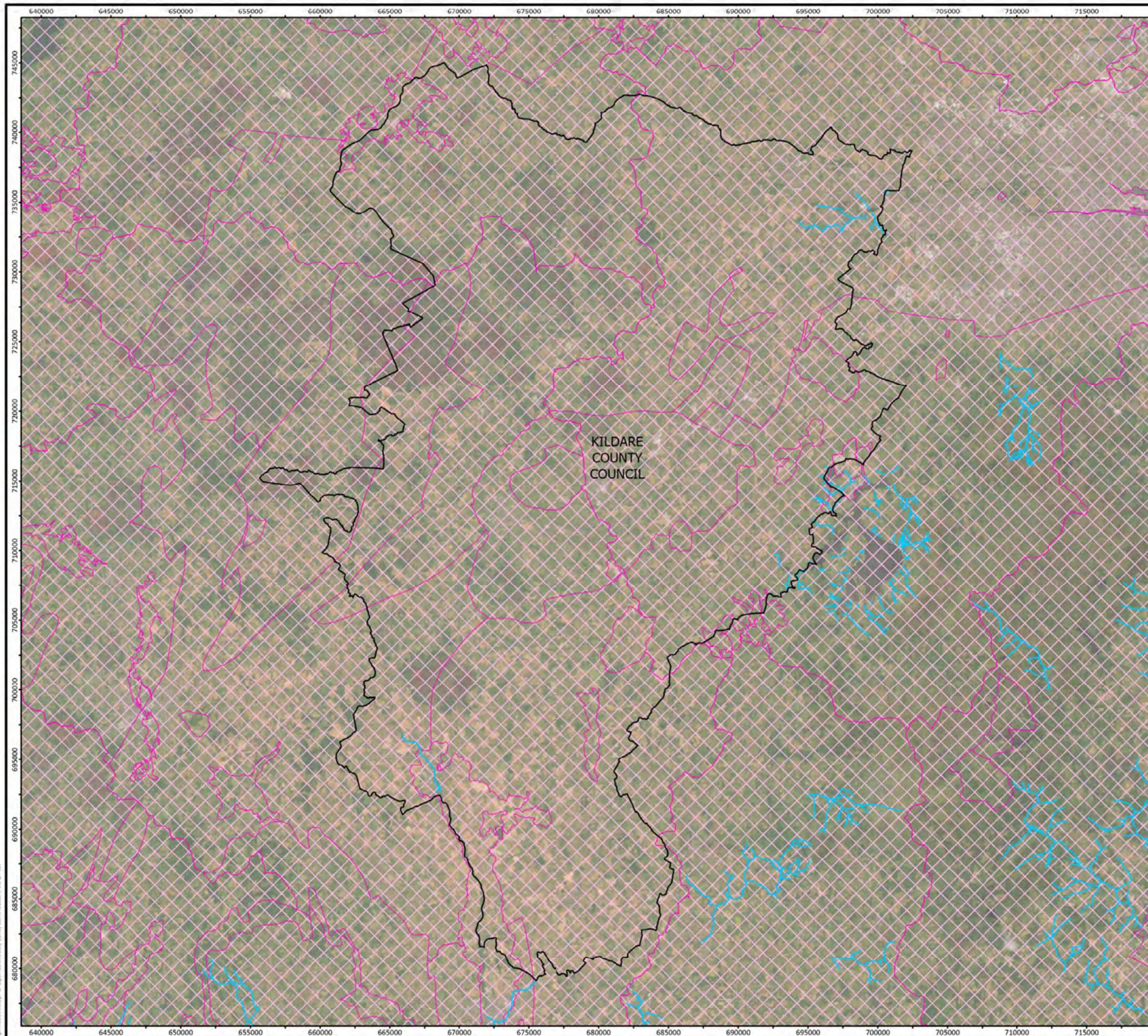
WFD Register of Protected Areas	
Salmonid	
KILDARE COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18b
CLIENT:	KILDARE COUNTY COUNCIL
DATE:	20/09/2023
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- Legend**
- Local Authority Boundaries
 - Designated Nutrient Sensitive Points
 - WFD Riverwater Bodies that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons)
 - Designated Nutrient Sensitive WFD Riverwater Bodies
 - 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	
KILDARE 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 Groundwaters that are protected for drinking water

WFD Register of Protected Areas Drinking Water	
KILDARE 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 (see Section 4.5) and natural resources of economic value, such as soil⁵⁶, air and water (see Sections 4.6, 4.8 and 4.9).

4.10.2 Water Services

4.10.2.1 *Wastewater*

Wastewater demand and capacity information at settlements was considered by the SEA, where available, includes⁵⁷:

- 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 report⁵⁸ '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. None of the urban areas in Kildare is listed as a priority area.

4.10.2.2 *Surface Water Drainage*

Sustainable Urban 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.

⁵⁶ Soil and geological resources has been considered under this topic including with respect to mineral locations and aggregate potential.

⁵⁷ Detailed water services information inform the preparation of the SEA Environmental Report.

⁵⁸ 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, Kildare was guided by the Eastern-Midlands Waste Management Plan 2015-2021 which provided the framework for solid waste management in the region. Post 2021, waste management in Ireland is to be guided by the first National Waste Management Plan for a Circular Economy, which replaces 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

Kildare is traversed by two major roads networks – the M4 and the M7. The County is served by Irish Rail, Bus Éireann and a number of private buses.

4.10.5 Green Infrastructure

Green infrastructure (GI) is a crucial component 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 Green Infrastructure strategy for Kildare provides a vision and a robust spatial framework which identifies, protects, promotes and enhances the GI assets in the urban, and rural environments of the County.

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, 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 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.



4.10.8.1 *Energy Related Material Assets and Infrastructure*

SEAI (2020⁵⁹) 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 2020⁶⁰). This is an important feature of Kildare's function onshore.

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)⁶¹
- Electricity Supply Board (ESB)
- Iarnród Éireann
- Irish Bioenergy Association (IrBEA)
- Irish Solar Energy Association (ISEA)
- Irish Wind Energy Association (IWEA)
- SEAI
- Transport Infrastructure Ireland (TII)
- Uisce Éireann
- Waterways Ireland

4.10.9 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.
- 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.

⁵⁹ SEAI. 2020. SEI01 - Energy Balance data resource; Available at [SEI01 - Energy Balance \(ktoc\) - Datasets - data.gov.ie](https://data.gov.ie/datasets/sei01-energy-balance-ktoc)

⁶⁰ SEAI. 2020. Overall renewable energy share - available at [Renewables | Energy Statistics In Ireland | SEAI](https://data.gov.ie/datasets/sei01-energy-balance-ktoc)

⁶¹ [Energy Offshore Renewable - Datasets - data.gov.ie](https://data.gov.ie/datasets/sei01-energy-balance-ktoc)



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. Fáilte Ireland has recently published their four brand strategies⁶² which will define the spatial scope and spread of future tourism developments within Ireland. Kildare hosts 'Ireland's Ancient East', which includes Kildare village, historical monuments and the county's countryside. At a county level, Kildare County Council has developed the Strategic Plan for Tourism in Kildare 2022-2027. Cultural Heritage sites also support heritage-related tourism and recreation, see Section 4.5 Landscape is also an important aspect in terms of Tourism, see Section 4.4

The assessment of Tourism and Recreation has been utilised the follow information sources:

- Department of Transport, Tourism and Sport
- Central Statistics Office (CSO)
- Recreational sailing groups and ferry operators
- Fáilte Ireland
- 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.
- 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.

⁶²Wild Atlantic Way, Dublin's a Breath of Fresh Air, Ireland's Ancient East and Ireland's Hidden Heartlands



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 has considered data related to climate from the following sources:

- Climate Change Advisory Council's Annual Review 2023
- Department of the Environment, Climate and Communications
- EPA
- CFRAM Studies⁶³

4.12.1 Key Issues Relating to the LACAP

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

- 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.

4.13 Constraints and Opportunities

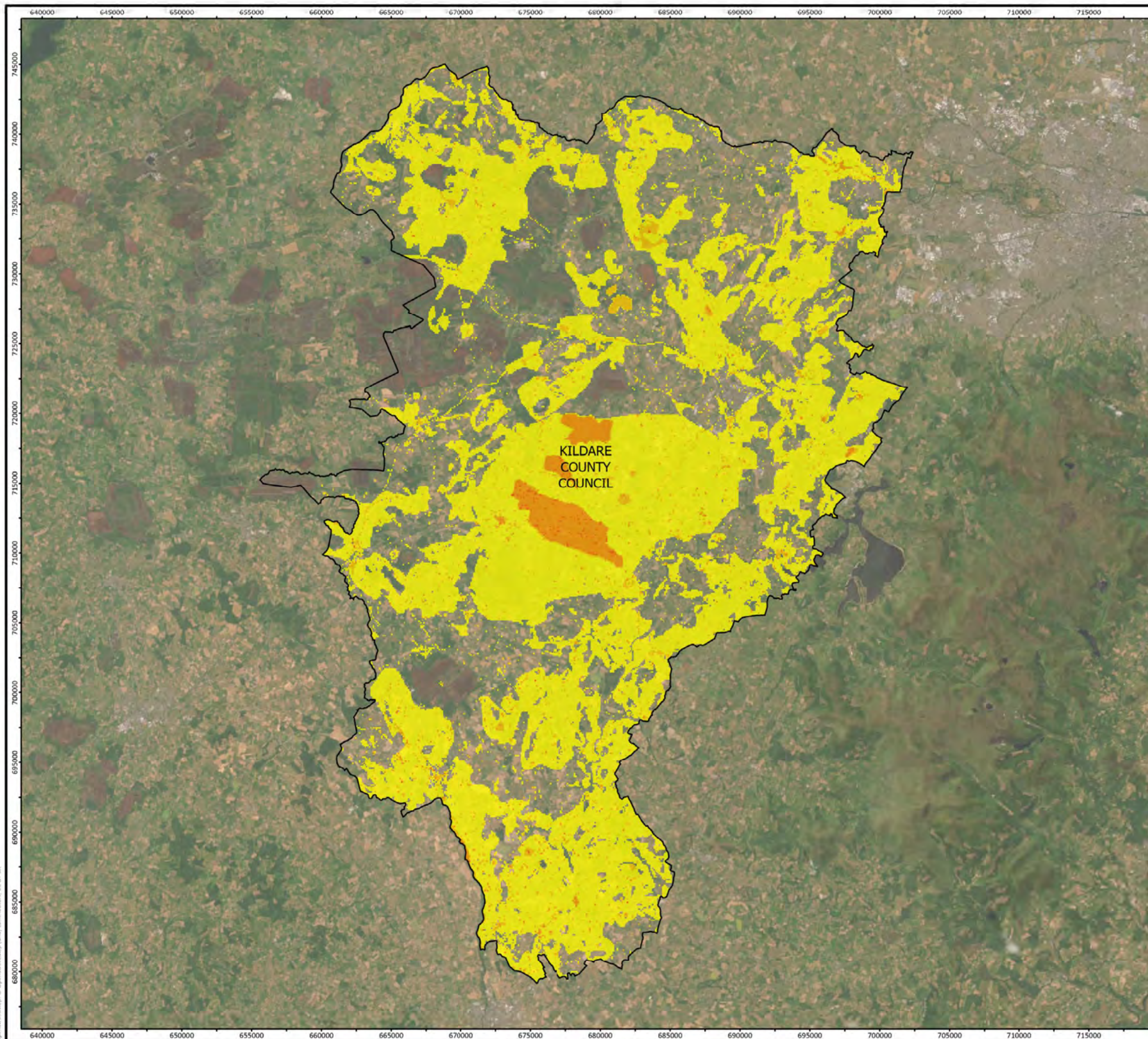
The environmental baseline data was overlaid in raster form and ranked accordingly to produce an overall constraints and opportunities map for the Councils administrative boundary (Figure 4-19). The map was prepared using Geographical Information System (GIS) software that allowed for a weighting system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

⁶³ 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)



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.



Legend

Local Authority Boundaries

Constraints & Opportunities



Constraints and Opportunities

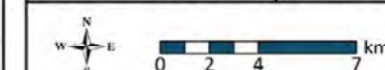
KILDARE COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.19

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

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 Kildare County Development Plan (CDP) 2023-2029, which is the primary development control framework relevant to the study area. The baseline environment would also be strongly influenced by the KCC County Biodiversity Action Plan and 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 organization would adequately reduce its organizational 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 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. 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 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 variety of community engagement measures defined in the plan 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 realized. 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 that the likelihood of the local authority and local community realizing GHG emission reductions commensurate to national GHG emission reductions targets would be reduced. At the same, 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 KCC'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. ⁶⁴
	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 minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, 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.
	W5	Prevent impact upon drinking water quality.

⁶⁴ '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
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	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 PLAN 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 KCC'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.
- 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 alternatives 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 plan - the reduction of GHG emissions at Local Authority organizational 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 plan 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 plan 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 utilized 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.

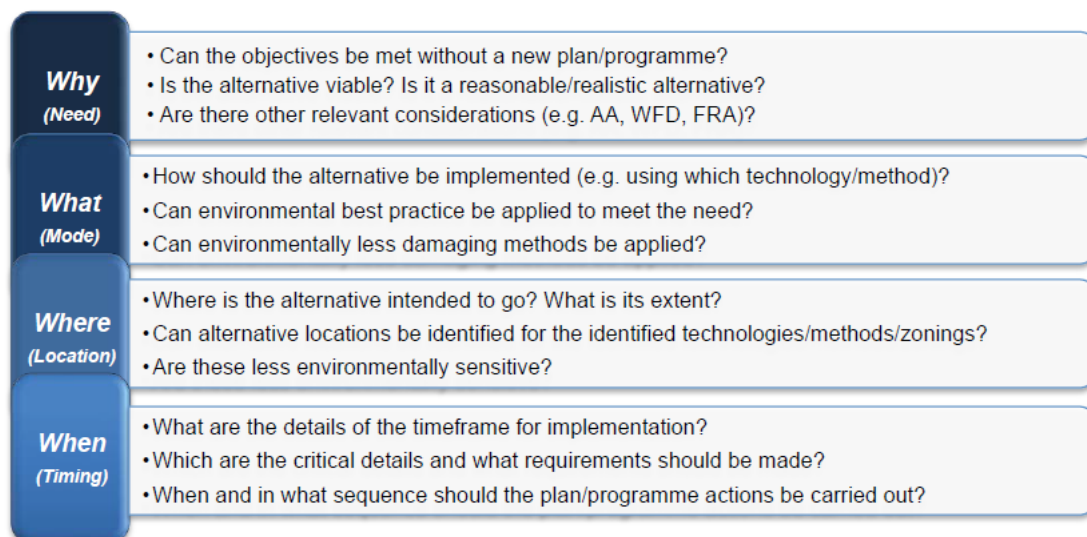


Figure 6-1: 'Why? What? Where? When?' Model for framing alternatives - Adapted from Figure 4.3 Developing and Assessing Alternatives in the Strategic Environmental Assessment Process (EPA, 2015).

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).
Alternative 1 - The Pareto Approach: Prioritize reducing GHG emissions from largest GHG emitting sectors to mitigate against climate change impacts.	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 reasonable influence having regard to the functions of a local authority - the Residential and Transport sectors.	This was a viable alternative that could achieve a significant reduction in GHG emissions by prioritizing and supporting climate mitigation related action for the Residential and Transport sectors. This alternative would be relevant to the county of Kildare. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).
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.	This alternative involved developing a LACAP that has a balanced focus on both climate mitigation and adaptation across several theme areas and all socio-economic sectors.	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 theme areas would be supported by the LACAP. This alternative would be relevant to the county of Kildare. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).
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.	This alternative involved developing a LACAP that has a balanced focus on both climate mitigation and adaptation across several theme 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 plan.	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 theme 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 organizational support given its strong community engagement emphasis. This alternative would be relevant to the county of Kildare. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).



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 categorized as follows in the matrix:

- Potential Positive Environmental Impact (indicated in the matrix by a '+').⁶⁵
- Potential Negative Environmental Impact (indicated in the matrix by a '-').⁶⁶
- 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').

⁶⁵ Potential Positive Environmental Impacts are defined as having the potential to support the achievement of an SEO.

⁶⁶ 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. A1 will strongly emphasize 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.
	B2	0	+	+	
	B3	0	+	+	
	B4	0	+	+	
	B5	0	+	+	
Landscape & 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 resilience 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 and parkland 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 Plan

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 realize 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 organizational, 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 realize 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 PLAN 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 Plan 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 Theme 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, cumulative⁶⁷, synergistic⁶⁸, 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.

⁶⁷ The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

⁶⁸ 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 Plan Implementation

Key Environmental Effect	Main Relevant Environmental Component/s
The variety of climate actions defined in the plan, including organizational 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 alleviation and resilience actions, including development and maintenance related actions. These 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 alleviation 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
The plan contains a set of actions designed to promote better resource management and the circular economy at organizational, 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.	MA, W, S, PHH, CC.
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.	PHH, AQN, N, S, MA.
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.	BFF.
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.	PHH, W, S, AQN, BFF, CH.
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.	PHH, BFF, CH.
Plan 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.	PHH, AQN, CC, LU, MA.
Plan 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.	PHH, AQN, W, S, BFF, CHH, MA, LU.
Plan 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.	AQN, CC, PHH.



Key Environmental Effect	Main Relevant Environmental Component/s
Plan 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.	PHH, AQN, W, BFF.

Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape & 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.



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 resilience, 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 resilience 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.



Plan 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, Seascap 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, Seascap 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 resilience, 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, the Greater Dublin Cycle Network Plan, 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. (E.g., Strategic Plan for Tourism in County Kildare 2022-2027).
- The LACAP supports a variety of actions relating to flood resilience 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 (E.g., Greater Dublin Area Cycle Network Plan, The Greater Dublin Transport Strategy 2016-2035). 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 maximize potential positive effects of the plan:

- 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** - would 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 and Participatory 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 Plan

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 plan 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 maximizing identified positive environmental effects of the LACAP.

Mitigation measures were suggested that maximize 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 plan. 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 plan. 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 Plan 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 maximized (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 maximize 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
1.10	Prepare and apply a protocol to enable and require a pre-set standard for 'Climate Proofing' including energy efficient, accessible and water sensitive urban design of all local authority led capital plans, purchases and investment for example; projects funded under the Outdoor Recreation Scheme, Active Travel Scheme, Urban Regeneration and Development Fund etc.	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.
1.11	Update the Kildare County Council Major Emergency Plan to ensure that all climate change risks to the human, natural and built environment (including heritage) are suitably addressed and a resilient response is available.	Attach the following text to the action: having due regard to environmental sensitivities such as European Sites and biodiversity.
2.2	Promote the Midlands Retrofit Programme to ensure that existing council-owned houses are retrofitted to a minimum Building Energy Rating of B2 (or to a cost-optimal level).	Attach the following text to the action: having due regard to environmental sensitivities such as local human receptors, protected species associated with such buildings, European sites and biodiversity; and the need to appropriately protect and conserve protected structures, during any retrofitting works.
2.3	Promote the National Retrofitting Scheme to private householders to highlight the package of supports to make it easier and more affordable for homeowners to undertake home energy upgrades.	Attach the following text to the action: whilst advocating and exerting influence to ensure due regard is had to environmental sensitivities such as local human receptors, protected species associated with such buildings, European sites and biodiversity; and the need to appropriately protect and conserve protected structures, during any retrofitting works.
2.4	Communicate details of case studies and guidance on the upgrade of traditional building to promote as exemplar.	Attach the following text to the action: ensuring appropriate guidance is provided on the protection of architectural and heritage value and protected species associated with such buildings during upgrade works.
2.5	Develop projects to promote adaptive reuse of historic structures - using exemplar retrofitting projects and carbon budgets to demonstrate climate value and publish relevant case studies.	Attach the following text to the action: having appropriate regard to the need to protect and conserve the architectural or cultural heritage value that may be associated with such buildings, and protected species that may be present in such buildings.
2.6	Build climate resilience and improve energy performance of architectural and archaeological heritage in public and private ownership through schemes such as the Built Heritage Investment Scheme, Historic Structure Fund, Historic Towns Initiative, Irish Walled Towns Network and Community Monuments Fund.	Attach the following text to the action: having appropriate regard to the need to protect and conserve the architectural or cultural heritage value that may be associated with such buildings, and protected species that may be present in such buildings.



LACAP Action Reference	LACAP Action	Mitigation Measure
2.7	Prepare and implement a programme of measures for Council Buildings/Facilities to assist in achieving a 51% reduction in non-electrical related greenhouse gas (GHG) emissions by 2030 and to improve adaptation to climate change. This will be assisted by Building Information Modelling (BIM) and adhere to the Capital Works Management Framework (CWMF) requirements.	Attach the following text to the action: Prepare and implement a programme of measures for Council Buildings/Facilities to assist in achieving a 51% reduction in non-electrical related greenhouse gas (GHG) emissions by 2030 and to improve adaptation to climate change; having due regard to environmental sensitivities such as local human receptors, protected species that may be present in such buildings, European sites and biodiversity, and the need to appropriately protect and conserve protected structures. This will be assisted by Building Information Modelling (BIM) and adhere to the Capital Works Management Framework (CWMF) requirements.
2.10	Ensure all developments including car parks are designed in such a manner as to support EV charging, promote carbon sequestration, green infrastructure, and nature-based surface water drainage solutions. Work with relevant bodies to identify optimum locations and provide suitable EV charging points for Public Transport Vehicles in town centres and key points on inter rural bus routes.	Attach the following text to the action: Advocate and exert influence and control, as appropriate, to ensure such development promotes climate action co-benefits and does not contravene relevant environmental protection criteria or cause significant negative environmental effects.
2.12	Identify roads and streets within the County that are suitable for road space reallocation. Prioritise roads and streets currently or likely to be used by public potential town bus services. Work towards ensuring network options are developed between active travel options and public transport routes.	Attach the following text to the action: Identify roads and streets within the County that are suitable for road space reallocation, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage. Prioritise roads and streets currently or likely to be used by public potential town bus services. Work towards ensuring network options are developed between active travel options and public transport routes.
2.13	National Sustainable Mobility Policy to increase provision of park and ride/share at transport interchanges and community hubs and support the development of Town Bus Services and park and ride/share locations to maximise connectivity for the highest number of residents.	Attach the following text to the action: Ensure such development promotes climate action co-benefits, including SuDS and nature based solutions, and does not contravene relevant environmental protection criteria or cause significant negative environmental effects.
2.15	Develop and publish a cycle network plan [LK3] for the County. Where possible, ensure the cycle network is planned on the principle of 'origin and destination' that prioritises connectivity to places of education, employment and public. Develop secure bike / mobility parking options that aligns to route options and trip attractor locations.	Attach the following text to the action: Ensure the cycle network is planned in a manner that has due regard to environmental sensitivities such as the receiving water environment, local air quality, biodiversity, European sites and cultural heritage.
2.16	Expand the greenway network in the County establishing linkages with towns and villages in line with the strategic national cycle network and avoid locating greenways in sensitive natural/biodiversity areas.	Attach the following text to the action: Ensure greenway infrastructure is planned and developed in a manner that has due regard to environmental sensitivities such as the receiving water environment, local air quality, biodiversity, European sites and cultural heritage.



LACAP Action Reference	LACAP Action	Mitigation Measure
2.18	Deliver the Pathfinder Projects identified for County Kildare under the National Sustainable Mobility Policy such as the Naas Mobility Network Integration and Energy Performance and Building Directive initiatives.	Attach the following text to the action: having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity; and the need to appropriately protect and conserve protected structures, during any retrofitting works.
2.21	Develop an Electric Vehicle Network Plan to identify charging points including high powered charging hubs 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, and cultural heritage.
2.22	Promote and implement the Safe Routes to School Programme to create safer walking and cycling routes within communities, alleviate congestion at the school gates and increase the number of students who walk or cycle to school by providing safe infrastructure.	Attach the following text to the action: Ensure supported active travel development is carried out in a manner that has due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, existing traffic and transport conditions and amenity value.
2.24	Establish a comprehensive and integrated network of remote working hubs throughout the County to support remote working and reduce commuter travel in line with the National Remote Work Strategy and Kildare Hub Strategy.	Attach the following text to the action: ensuring such hubs are located and planned in a manner that does not cause unintended, negative local traffic and transport related impacts.
3.1	Develop Green Infrastructure Plan (as defined by the EU as 'A strategically planned network of natural and semi-natural areas with other environmental features, designed and managed to deliver a wide range of ecosystem services, while also enhancing biodiversity') including a green infrastructure network for the County that incorporates climate change mitigation and adaptation to increase climate resilience.	Attach the following text to the action: climate action co-benefits and environmental protection requirements.
3.3	Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity and water quality levels in keeping with the 'All Ireland Pollinator Plan' and as part of this to develop and implement pesticide reduction policy for lands and areas managed by the Council.	Attach the following text to the action: ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.
3.4	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.	Attach the following text to the action: having due regard to hedgerow and riparian area conservation requirements and the need to avoid habitat fragmentation.
3.6	Commission the 'Local Authority County Wetland Survey', develop a Wetland Restoration Plan, this shall identify priority areas for habitat restoration, carbon capture and water and biodiversity benefits, along with phasing for restoration.	Attach the following text to the action: This plan shall be developed by a competent ecology team, and shall have 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.



LACAP Action Reference	LACAP Action	Mitigation Measure
3.7	The Council will seek to prioritise the delivery of Catchment Flood Risk Assessment and Management Programme identified flood schemes in the county and promote nature-based solutions and integral to these schemes.	Attach the following text to the action: having due regard to the need 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.
3.8	Develop integrated programme to address Invasive Alien Species.	Attach the following text to the action: This programme shall be developed by a competent ecology team, and shall have due regard to the need to appropriately manage and prevent the spread of invasive species.
3.9	Develop a plan of action to protect, conserve and enhance the wetlands identified in the County Kildare Wetland Survey 2012-2014.	Attach the following text to the action: This plan shall be developed by a competent ecology team, and shall have 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.
3.10	Prepare guidance document and training on quality rating and management prescription of hedgerows in open space for Council staff and developers.	Attach the following text to the action: having due regard to hedgerow and riparian area conservation requirements and the need to avoid habitat fragmentation.
3.14	Devise a county tree management plan which seeks to retain existing trees, support the planting of trees and identify sites for large scale native and mixed woodland planting. Set targets to maintain existing and plant new native trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Increase range of edible native provenance locally sourced fruits, flowers and vegetables in Council Parks, rooftops and open spaces.	Attach the following text to the action: Devise a county native tree management plan which seeks to retain existing native trees, support the planting of native trees and identify sites for large scale native and mixed woodland planting. Set targets to maintain existing and plant new native trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Increase range of edible native provenance locally sourced fruits, flowers and vegetables in Council Parks, rooftops and open spaces.
3.15	Deliver the enhanced rehabilitation of former industrial peatlands within the County in line with Irelands National Recovery and Resilience Plan.	Attach the following text to the action: whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.
3.16	Engage with Bord na Móna to explore the appropriate and sensitive diversification of former cutaway peatlands and development of alternative uses such as rewetting and recreational facilities under the brown to green agenda under the National Strategy on Outdoor Recreation.	Attach the following text to the action: whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.



LACAP Action Reference	LACAP Action	Mitigation Measure
3.17	Engage with Bord na Móna to develop a Green Infrastructure Masterplan to inform the delineation of core areas, steppingstones and corridors to support the development of the Bog of Allen Nature Reserve, Special Amenity Area Order and/or National Peatlands Park.	Attach the following text to the action: whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.
3.22	Provide technical supports to farming enterprises in the development of biomethane from Anaerobic Digestion.	Attach the following text to the action: including guidance on planning and environmental protection requirements.
3.24	Develop pesticide use policy for the City or County Council.	Attach the following text to the action: ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.
4.8	Ensure the continued incorporation of Flood Risk Management and Climate Change Sectoral Adaptation Plans into the spatial planning of the County to meet the requirements of the EU Floods Directive and the EU Water Framework Directive and to promote a climate resilient County.	Attach the following text to the action: having due regard to the need 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.
4.9	Implement all Area Specific Recommendations presented in the Strategic Flood Risk Assessment for the Kildare County Development Plan 2023-2029.	Attach the following text to the action: having due regard to the need 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.
4.12	Resolve local flooding issues utilising OPW and Department of Transport funding (Drainage programme, Climate Adaptation and Resilience Works, OPW Minor Works Scheme) incorporating Sustainable Urban Drainage Systems.	Attach the following text to the action: having due regard to the need to promote 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.
4.13	Support and inform a climate proofing programme for natural water resources, and to better manage flooding at the catchment level, the Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk.	Reword to the following: Support and inform a climate proofing programme for natural water resources. To better manage flooding at the catchment level, the Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk.
4.14	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.	Attach the following text to the action: Depending on the outcome of the assessment, implement any protective and remediation measures for waterbodies that may be identified.



LACAP Action Reference	LACAP Action	Mitigation Measure
4.18	Implement the Local Just Transition Plan for West Kildare to support and advance sustainable social, economic, and environmental development in the transition to a low carbon future in the West Kildare region.	Attach the following text to the action: having due regard to environmental sensitivities in the area such as European Sites, noise, landscape and visual amenity, cultural heritage and biodiversity related sensitivities.
4.19	Support the programme for a free energy report for householders in the Just Transition area to provide advice on options for retrofit and free support for accessing grants such as the 'better energy communities' and 'national retrofit' grants.	Attach the following text to the action: whilst advocating and exerting influence to ensure appropriate regard is had to the need to protect and conserve biodiversity, air and water quality, European Sites, and protected structures during retrofitting.
4.20	Support Just Transition projects with a climate focus, such as the Midlands Bioenergy Development Project within the County.	Attach the following text to the action: whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.
4.22	Explore the creation of local authority apprenticeship programme in use of traditional materials and skills to assist in carrying out conservation of traditional structures to increase their climate resilience and raise awareness of the importance of traditional skills and materials.	Attach the following text to the action: whilst incorporating appropriate training to mitigate against any environmental and biodiversity impacts that may arise on sites.
5.1	Prepare and implement an overall Renewable Energy Strategy for the County that is informed by the national Renewable Electricity Spatial Policy Framework to support sustainable development of onshore wind and solar within the County.	Attach the following text to the action: whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.
5.2	Implement the Kildare County Council Wind Energy Strategy.	Attach the following text to the action: whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.
5.3	Support local community-based renewable energy projects and new micro-generation and small-scale generation renewable energy projects.	Attach the following text to the action: where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.
5.4	Support ongoing expansion and improvements to the electricity grid infrastructure within the County to support renewable generation and supply.	Attach the following text to the action: having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value, water and air quality.
5.6	Undertake a feasibility study on integrating solar photovoltaic at Kildare County Council owned car parks and on the roof tops of publicly owned buildings throughout the County.	Attach the following text to the action: ensuring the study has appropriate regard to planning and environmental considerations. If considered feasible, the project should have appropriate regard to relevant planning and environmental protection criteria.



LACAP Action Reference	LACAP Action	Mitigation Measure
5.7	Support Bord na Móna with the redevelopment of the headquarters at Newbridge with a view to promoting the area as a Green Energy Hub.	Attach the following text to the action: having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value, water and air quality.
5.8	Require data centres to include strong energy efficiency measures (including demand management, energy efficiency or auto generation) to reduce operational carbon footprints through the use of sustainable sources of energy generation in the first instance and then the use of renewable sources of energy to power operations.	Attach the following text to the action: where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.
5.9	As part of the operational maintenance of all public lighting in the County, Kildare County Council shall develop and implement the phased introduction of energy-efficient lighting systems on all public lighting while having due regard for the impact on protected species such as bats.	Reword to the following: As part of the operational maintenance of all public lighting in the County, Kildare County Council shall develop and implement the phased introduction of energy-efficient lighting systems on all public lighting while having due regard for the impact the spectrum of light used will have on nocturnal species such as bats.
5.11	Implement a wider roll out of segregated brown bin collection systems across the County to capture this resource for treatment in Anaerobic Digestion plants for recovery of biomethane in line with the National Waste Management Plan for a Circular Economy.	Attach the following text to the action: whilst having due regard to environmental sensitivities such as European sites, biodiversity and amenity value, water and air quality.
5.12	Support the circular initiatives such as prevention, reuse, repair and recycling of resources to minimise waste treatment at waste to energy plants or landfills. Undertake a feasibility study to create a 'Bring/Take' centre within a key hub in the County.	Attach the following text to the action: ensuring the study has appropriate regard to planning, waste management and environmental requirements, considerations and constraints.
Maynooth DZ		
1.7	Collaborate with Maynooth University to align climate action initiatives within the town.	Attach the following text to the action: having due regard to opportunities to promote climate action co-benefits and environmental protection requirements.
2.3	Engage with educational premises to promote the Climate Action Fund to provide photovoltaic panels (up to 6kW output) in all schools.	Attach the following text to the action: where it is confirmed through a glint and glare assessment that such solar development will not have any potential glint and glare impact on sensitive receptors, or otherwise, where it is confirmed that such solar development constitutes exempted development under the Planning and Development Regulations by virtue of its size or location outside a Solar Safeguarding Zone, and having due regard to all other environmental sensitivities that could be impacted by such development.
2.4	Deliver the retrofit of all social housing in the town to achieve a Building Energy Rating B2.	Attach the following text to the action: having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations.



LACAP Action Reference	LACAP Action	Mitigation Measure
2.5	Promote retrofit to Building Energy Rating B2 or Nearly Zero Energy Buildings for private properties in the commercial and community sector.	Attach the following text to the action: having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations.
2.6	Support Maynooth University in the introduction of new-zero energy student accommodation within walking/cycling distance of the campus.	Attach the following text to the action: having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations.
2.7	Support remote working through the development of office hubs and co-working spaces in Maynooth to aid in reduced daily commuter travel outside the town.	Attach the following text to the action: ensuring such hubs are located and planned in a manner that does not cause unintended, negative local traffic and transport related impacts.
2.8	Prioritise transport policy in Maynooth to support safe active travel (pedestrians and cyclists) and public transport and to discourage private car use within the town (e.g., through car parking charges or car free days).	Attach the following text to the action: ensuring policy has appropriate regard to all planning and environmental protection requirements, including the need to protect biodiversity, flora, fauna, important habitats and European sites.
2.9	Promote active travel initiatives in the town to enable greater uptake of walking and cycling with a focus on strategic hubs such as the train station, the university and the town centre. Link with 2.10	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, cultural heritage.
2.10	Enable enhanced access to Maynooth train station, such as through improved footpaths, safe cycle lanes, local bus services, Park and Ride, etc., to maximise the modal shift potential of the local rail network.	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, cultural heritage.
2.11	Engage with bus companies to enhance the local bus services through delivery of an appropriately designated bus terminal in the town as well as associated infrastructure for improved bus services both in the town for linkages to other urban centres.	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, cultural heritage.
2.12	Support the development of electric vehicle charging points at strategic points in the town and supercharge points and incentives for electric vehicle users.	Attach the following text to the action: having due regard to ensuring disabled access to EV charging, and environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage.
2.14	Undertake a feasibility study to assess the potential for a Park and Ride facility outside of the town centre that would support the reduction of road traffic volumes through the town centre and promote active travel or public transport options as an alternative.	Attach the following text to the action: Ensure such development promotes climate action co-benefits, including SuDS and nature based solutions, and does not contravene relevant environmental protection criteria or cause significant negative environmental effects.



LACAP Action Reference	LACAP Action	Mitigation Measure
3.2	Support green infrastructure projects such as those providing linkages to open spaces for biodiversity such as the Carton Avenue Masterplan, the Harbour Field Improvement Works, the Lyreen River, the Rye River, the Royal Canal Greenway or via the Outer Orbital Route.	Attach the following text to the action: having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value, and the potential to enhance ecological connectivity.
3.5	Develop a landscaping plan for the town to enable the Council, citizens and businesses to coordinate the enhancement of biodiversity and any future native planting in the town.	Attach the following text to the action: Develop a landscaping plan for the town to enable the Council, citizens and businesses to coordinate the enhancement of biodiversity, ecological connectivity and any future native planting in the town.
3.6	Support carbon sequestration through strategic planting of native species for all new developments, underutilised lands or farms to promote biodiversity gain within Maynooth.	Attach the following text to the action: Support carbon sequestration through strategic planting of native species for all new developments, underutilised lands or farms to promote biodiversity gain and ecological connectivity within Maynooth.
3.7	Enhance green infrastructure in the town to support the development of sustainable urban drainage systems/swales/rain gardens to improve climate resilience.	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 and does not result in adverse effects to European sites and biodiversity.
5.1	Enable the replacement of fossil fuel through supports for the development of micro-generation, small-scale and community-owned renewable generation within Maynooth.	Attach the following text to the action: where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.
5.2	Liaise with ESB Networks to ensure prioritisation of the upgrade of the Maynooth electricity grid network to enable the required renewable energy generation capacity in the town.	Attach the following text to the action: having due regard to environmental sensitivities such as the receiving noise, soils and water environment, biodiversity, European sites, local air quality, cultural heritage
5.3	Undertake a feasibility study of the potential for district heating or energy in Maynooth.	Attach the following text to the action: ensuring such a report as appropriate regard to planning and environmental protection considerations.
5.4	Upgrade all public lighting in Maynooth to energy-efficient light-emitting diode (LED) lights or equivalent.	Attach the following text to the action: while ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.
5.6	Promote the concept of a sharing, reuse and repair society including waste resource exchanges for key products (tools, toys, etc).	Attach the following text to the action: ensuring all reuse and repair promotion activities are carried out in accordance with good waste management practices; and accord with, or support the public's accordance with the provisions of the Waste Management Act.



LACAP Action Reference	LACAP Action	Mitigation Measure
5.8	Support the development of sustainable and circular infrastructure to manage organic wastes such as anaerobic digestion or composting in the town.	Support the development of sustainable and circular infrastructure to manage organic wastes such as anaerobic digestion or composting at an appropriate location in the vicinity of the town; whilst ensuring: 1. Appropriate regard is given to planning and environmental protection constraints and considerations during the development planning process; 2. Such development does not cause unintended, significant, negative environmental effects in the area; and, 3. Such facilities operate in accordance with the provisions of the Waste Management Act.

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

Promote climate action projects that support and maximize 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 all development underpinned or supported by climate action is planned and implemented in a manner that appropriately considers the potential for environmental co-benefits, potential environmental impacts and environmental protection requirements. No climate action related development project that is likely to have significant negative effects on the receiving environment shall be supported.
Flood projects, or related maintenance works, shall be carried out in a manner that promotes climate action-biodiversity related co-benefits, and shall have due regard for the protection and enhancement of rare, protected or important habitats and species.
Ensure climate action related projects are carried out in a manner that promotes climate action-cultural heritage co-benefits, and do not result in unauthorized physical damage to cultural, archaeological or architectural features, or unauthorized or inappropriate alteration of the context of sensitive cultural heritage features.
Ensure climate action related projects are carried out in a manner that promotes climate action water quality co-benefits, and align with the provisions of the Water Framework Directive and relevant River Basin Management Plan.
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 all projects supported by the council have taken the necessary precautions to identify and manage invasives species, particularly with regard to Schedule III species. No climate action related development project that is likely to cause the spread of invasives species listed in Schedule III shall be supported.
Support opportunities to support 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 summarized 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

The LACAP has been approved by Kildare County Council. This document is the final SEA Environmental Report. 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.

Kildare 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 plan's five-year lifetime. This monitoring will be carried out by the Climate Action section of Kildare 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 realized, the LACAP should be reviewed and updated in a manner that supports the realization of all potential positive environmental effects, having regard to the overall vision and high-level objectives of the plan.

The SEA Monitoring Programme established for the LACAP is contained in Table 9-1. 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 Plan 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). Number and geographical distribution of Species or Species population trends impacted by climate change.	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. No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.	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
			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.	Planning consent for development proposals supported by the plan only to be granted where development complies with policy supporting biodiversity protection and enhancement.	
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species ⁶⁹ .	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.	Internal monitoring of likely significant environmental effects of development projects. Consultation with the NPWS. 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. Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the Birds Directive under Article 12. Review of NPWS publications regarding the status of European sites.
	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.	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. Linear meters of riparian corridors enhanced with native planting.	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. Increase linear metres of riparian corridor enhanced with native planting. Reduce habitat fragmentation or breaks.	Internal monitoring of likely significant environmental effects of development projects. Mapping of LR important habitats and species as part of the County Biodiversity Plan.

⁶⁹ '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
			Fragmentation or breaks in continuity of habitats and loss of wildlife corridors, stepping stones and connectivity (km ²). Number of developments consented that have significant greenspace proposals.	Increase number of developments consented that have significant greenspace proposals.	
	B4	To avoid or minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.	Condition of semi-natural habitats, species, environmental features or other sustaining resources in designated national sites. Status of listed species in the Wildlife Acts 1976 - 2012.	No adverse impacts on condition of semi-natural habitats, species, environmental features or other sustaining resources in designated national sites as a result of plan implementation. No adverse impacts on listed species in the Wildlife Acts 1976 - 2012 as a result of plan implementation.	Internal monitoring of likely significant environmental effects of development projects. Mapping of LR important habitats and species as part of the County Biodiversity Plan.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, in response to the biodiversity emergency.	Compliance of development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined the CDP. No. of developments consented that have significant greenspace proposals. 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 CDP. Increase number of developments consented that have significant greenspace proposals. Increase quantum of improved biodiversity areas. 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.	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. Mapping of LR important habitats and species as part of the County Biodiversity Plan.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
Landscape & Visual Amenity	L1	Avoid or, minimise impacts to statutory landscape designations defined in the CDP.	<p>Status of Landscape Character Areas, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects.</p> <p>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.</p> <p>Number of areas in the local authority functional area designated for their landscape character.</p>	<p>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.</p> <p>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.</p>	<p>Internal monitoring of compliance with CDP Policy Objectives.</p> <p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Review of future iterations of the Landscape Character Assessment.</p>
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.	<p>Number of developments consented that result in avoidable adverse visual impacts on residential receptors or other sensitive visual receptors.</p> <p>Number of areas in the local authority functional area designated for their visual amenity.</p>	<p>No development supported by the plan should have a significant adverse visual impact on residential receptors or other sensitive visual receptors.</p> <p>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.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Review of future iterations of the Landscape Character Assessment.</p>
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>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
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.	Internal monitoring of likely significant environmental effects of development projects. Consultation with Geological Survey of Ireland and review of published data on the soils environment.
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.	Internal monitoring of likely significant environmental effects of development projects. Review of Land Use, Land Use Change and Forestry related Greenhouse Gas emissions calculated in the Baseline Emission Inventory.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.	% change in modal split. Length of new sustainable transport routes developed.	Reduction in private car use. Extension and improvement of the sustainable transport network in the plan area.	Central Statistics Office (CSO) Population data - Commuting in Ireland. Internal monitoring of length of new sustainable transport routes developed.
	AQN2	Avoid or minimise effects on local air quality.	Number of developments consented that result in avoidable adverse air quality impacts on sensitive receptors. Number of exceedances of ambient air quality standards in the County, as monitored under the EPA's National Ambient Air Quality Monitoring Network. Improvements in air quality status in the county.	No development supported by the plan should have a significant adverse air quality impact on sensitive receptors. All development supported by the plan should adhere to relevant Development Management Standards defined in the CDP relating to the protection of air quality. Minimise ambient air quality standard exceedances in the County.	Internal monitoring of likely significant environmental effects of development projects. Consultation with the EPA. Review of EPA Air Quality Monitoring undertaken in the County. Review of EPA annual 'Air Quality in Ireland' Report



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	AQN3	Avoid or minimise adverse noise impacts.	Number of sensitive receptors exposed to noise nuisance.	No sensitive receptors exposed to nuisance noise in the County.	Internal monitoring of likely significant environmental effects of development projects. Monitoring of internal noise complaint investigations undertaken. Consultation with the EPA.
Water	W1	Maintain and/or improve, the quality and status of surface waters.	Status of surface water bodies as reported by the EPA Water Monitoring Programme for the Water Framework Directive (WFD) Status of bathing waters as monitored under the Bathing Water Directive.	Number of Pollution Incidents detected due to poor bathing water quality results. Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status.' 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. Implementation of the objectives of the second cycle of the national River Basin Management Plan.	EPA surface water monitoring data and reports. EPA bathing water monitoring data and reports. Review of environmental quality data detailed in the EPA Maps Application
	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.	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.	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.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	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
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. 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
			Tonnes of Bulky waste received at Council Waste Management Facilities annually. Tonnes of garden waste received at Council Waste Management Facilities annually.		
	MA15	Promote sustainable water use and drainage management.	Level of water use in the County. Compliance with Sustainable Drainage System (SuDS) related development management standards defined in the CDP.	Reduced water use in the county. All development (supported by the plan) must comply with SuDS related development management standards defined in the CDP.	CSO water consumption data. Internal monitoring of flood risk associated with development projects and development project compliance with relevant flood risk and management related development management standards.
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.	Level of Greenhouse Gas (GHG) emissions in the County. Level of renewable energy infrastructure in the County.	Reduce GHG emissions associated with the Energy sector in the County. Increase the level of renewable energy infrastructure in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County. Megawatt hour (MWh) output from renewable energy infrastructure in the county.
	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	Assist in the delivery of the climate neutrality objective at local and community levels.	Level of GHG emissions in the County. Level of GHG emissions in the Decarbonising Zone. Net addition of tree cover added.	Reduce GHG emission in the County to Net Zero. Reduce Decarbonising Zone GHG emissions to Net Zero. Increase level of tree cover in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County. Baseline Emission Inventory for the Decarbonising Zone.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	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 Plan 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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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 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. 	<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 Annex III. • 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. 	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.
Habitats Directive (92/43/EEC)	<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. 	<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. 	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
	<ul style="list-style-type: none"> • 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"> • 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. 	
Birds Directive (2009/147/EC)	<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 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"> • 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). • 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. 	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 Bathing Water Directive (revised) 2006 [2006/7/EC]	<ul style="list-style-type: none"> • 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

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	<ul style="list-style-type: none"> 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.</p> <p>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 emissions	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.	<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>	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
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. 	<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 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 communities. • 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"> • 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. • Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports. 	<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
Directive 2018/2001 on the promotion of the use of energy from renewable sources (recast)	<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.</p> <p>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>	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.
Alternative Fuels Infrastructure Directive (2014/94/EU)	<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>	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
Energy Efficiency Directive (EU) 2023/1791	<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 audits. • Bringing in a new obligation to monitor the energy performance of data centres, with an EU-level database collecting and publishing data. 	<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"> Promoting local heating & cooling plans in larger municipalities. Progressively increasing the efficient energy consumption in heat or cold supply, also in district heating. 	
EU Seveso Directive (2012/18/EU)	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.	<ul style="list-style-type: none"> The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burdens. 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. 	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.
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	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>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. 	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

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		<ul style="list-style-type: none"> • 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 ambitious global biodiversity framework under the Convention on Biological Diversity. 	environmental protection and management.
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; 	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

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		<ul style="list-style-type: none"> 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. 	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 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	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	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.	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

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			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 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.</p> <p>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. 	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 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%. 	<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. 	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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	<ul style="list-style-type: none"> Achieve a 20% improvement in the EU's energy efficiency. 	<ul style="list-style-type: none"> Preparing a legal framework for technologies in carbon capture and storage. 	
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. 	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.
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 compliance against limit values. 	<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 resulting from national and community measures. Ensures that such information on ambient air quality is made available to the public. 	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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	<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. 	<ul style="list-style-type: none"> 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. 	
Noise Directive (2002/49/EC)	<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. 	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.
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: The Drinking Water Abstraction Directive Sampling Drinking Water Directive Exchange of Information on Quality of Surface Freshwater 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. 	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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	<ul style="list-style-type: none"> • Shellfish Directive • Freshwater Fish Directive • Groundwater Directive • 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. 	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.
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. 	<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 	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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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 	
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>

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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. • 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. 	<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 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. 	
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	<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. 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>

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Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	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.	<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. 	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.
ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	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.	<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; • (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. 	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.

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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. 	<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 Landscape Convention 2000	<p>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.</p> <p>The Convention expresses a concern to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.</p>	<ul style="list-style-type: none"> • Promote protection, management and planning of landscapes. • Organise European co-operation on landscape 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>

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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. <p>Two additional horizontal priority objectives complete the programme:</p> <ul style="list-style-type: none"> • 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 	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.
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 	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.	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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Doha Climate Gateway (2012)	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.	<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; • 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. 	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 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 	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

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		<ul style="list-style-type: none"> • Restriction of chemicals. <p>REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.</p>	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 are listed in Annex B to the Convention • 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. 	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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Ramsar Convention	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".	Under the "three pillars" of the Convention, the Contracting Parties commit to: <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. 	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 2020 Strategy for Growth	Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities: <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. 	In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020: <ol style="list-style-type: none"> 1. 75 % of the population aged 20-64 should be employed; 2. 3% of the EU's GDP should be invested in R&D; 3. the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); 4. the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 5. 20 million less people should be at risk of poverty. 	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.
The European Green Deal (EGD) 2019	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.	<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. 	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

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		<ul style="list-style-type: none"> 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 	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 (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	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.	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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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 	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.
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; 	In preparation.	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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	<ul style="list-style-type: none"> • 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. 		
Planning and Development Act 2000 (as amended)	<p>The core principal 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>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	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). 	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 (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	These Regulations provide 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.	<ul style="list-style-type: none"> • 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

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			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	<p>Actions:</p> <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.
European Communities Environmental Objectives (Groundwater) Regulations 2016 (S.I. No. 366 of 2016)	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>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. 	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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		<ul style="list-style-type: none"> 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 	
S.I. No. 113/2022 - European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022	<ul style="list-style-type: none"> 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 contribute to improvements in 	<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>

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"> 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 	<ul style="list-style-type: none"> 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>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>

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"> Environmental Protection Agency (Industrial Emissions)(Licensing) (Amendment) Regulations 2020. European Union (Industrial Emissions) Regulations 2013 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>	<ul style="list-style-type: none"> These Regulations provide for transposition of the EU Bathing Water Directive 2006 (Directive 2006/7/EC of 15 February 2006) which aims: 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”. 	<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"> • 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. • 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. 	

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Bathing Water Quality (Amendment) Regulations 2011 (S.I 351 of 2011)	This Regulation defines further the minimum number of bathing water samples required to carry out a bathing water quality assessment.	Further defines the minimum number of bathing water samples required to carry out a bathing water quality 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.
Climate Action and Low Carbon Development (Amendment) Act 2021	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>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 objective, • 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 	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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		<ul style="list-style-type: none"> The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency. 	
Climate Action Plan 2023	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.	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	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.
Ireland's Second National Implementation Plan for the Sustainable Development Goals (2022 - 2024)	<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 'SDG Policy Map' indicating the relevant national policies for each of the targets. 	<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; To further incorporate the principle of Leave No One Behind into Ireland's Agenda 2030 implementation and reporting mechanisms; and Strong reporting mechanisms 	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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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 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.
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 upgrade 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.
All Island Grid Study 2008	<ul style="list-style-type: none"> The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources. 	<p>Key conclusions of the study:</p> <ul style="list-style-type: none"> The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study. 	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

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"> The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for increased shares of electricity sourced from renewable energy in the all island power system. 	<ul style="list-style-type: none"> All but the high coal-based portfolio lead to significant reductions of CO2 emissions compared to portfolio 1 All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports. The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact. Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered. Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security. 	<p>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>
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. 	<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 activity tourism to Ireland and are regularly used by overseas visitors, 	<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"> It also aims to increase the number and 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. 	<ul style="list-style-type: none"> 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; and 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. 	
National Water Resources Plan (2021)	<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 	<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"> Assess the water resources available at a national level including lakes, rivers and groundwater 	
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; Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality standards; and Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery 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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<p>National Landscape Strategy for Ireland 2015-2025 and National Landscape Character</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>

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National Hazardous Waste Management Plan (EPA) 2021 - 2027	<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 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. 	<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 • Implementation 	<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 Ports Policy 2013	The core objective of National Ports Policy is to facilitate a competitive and effective market for maritime transport services.	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.	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 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 	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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		<ul style="list-style-type: none"> Maintaining a safe and innovative general aviation sector to support Ireland's broader aviation industry 	
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	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.	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.	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.
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	The vision is: <i>"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."</i>	<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 	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.
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	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>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. 	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

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			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.
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

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			regulatory framework for environmental protection and management.
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. 	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 Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans (including transport)	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	<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. 	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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Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	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.	2030 will represent a significant milestone, meaning: <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. 	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.
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	The act provides protection and conservation of wild flora and fauna.	<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 	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.
Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	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.	<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 ecosystem services. • To conserve and restore biodiversity and ecosystem services in the wider countryside. 	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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		<ul style="list-style-type: none"> 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. To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services. 	
National Broadband Plan (2012)	Sets out the strategy to deliver high speed broadband throughout Ireland.	<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 the successful implementation of these targets. A series of specific complementary measures to promote implementation of Government policy in this 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.
The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)	<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. 	<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. 	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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	<ul style="list-style-type: none"> 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"> 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>European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)</p> <p>European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)</p> <p>European Communities Environmental Objectives (Surface waters) Regulations 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 charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions. 	<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. 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. 	<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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2009 (SI 272 of 2009)(as amended)		<ul style="list-style-type: none"> Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality. 	
Local Government (Water Pollution) Acts 1977 to 1990	The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.	<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. Prepare water quality management plans for any waters in or adjoining their functional areas. 	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.
Water Services Act 2007 Water Services (Amendment) Act 2012	<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. 	<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. 	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

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<p>Water Services Act (No. 2) 2013</p> <p>Water Services Act 2017</p>	<ul style="list-style-type: none"> 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 31 Local Authorities in Ireland. 	<ul style="list-style-type: none"> 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. <p>Overseeing the establishment of an economic regulation function under the CER.</p>	<p>environmental protection and management.</p>
<p>Irish Water's (now known as Uisce Eireann) Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2020 - 2024)</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 short and medium term.</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. Support Social and Economic Growth. Invest in the Future. 	<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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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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Rural Environmental Protection Scheme (REPS) Agri-Environmental Options Scheme (AEOS) Green, Low-Carbon, Agri-environment Scheme (GLAS) Agri-Climate Rural Environment Scheme (ACRES)	<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. • ACRES is Ireland's new agri-environment climate scheme under Ireland's CAP Strategic Plan. This new €1.5 billion flagship agri-environment scheme is a farmer-friendly scheme to help address biodiversity decline while delivering an income support for up to 50,000 farm families in Ireland. 	<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. 	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 Rural Development Programme	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>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 	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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		<ul style="list-style-type: none"> • 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 	
Forestry Programme 2023 – 2027	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>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. 	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.
River Basin Management Plan	River Basin Management Plans set out the measures planned to maintain and improve the status of waters.	<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. 	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 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 responsible. • 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>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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Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	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.	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.	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.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows: <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. 	Three high level goals of equal importance, based on the concept of sustainable development are identified: <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 adversely impact the environment and its living and non-living resources. 	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.
Draft Renewable Electricity Policy and Development Framework (DCCAE) 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

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			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.	<p>Targets for alternative fuel infrastructure include the following:</p> <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.	<p>Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including:</p> <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.
Strategic Planning Policy Statement (SPPS) NI	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.	<ul style="list-style-type: none"> • The overall objective of the planning system is to further sustainable development and improve well-being for the people of the North. 	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

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			environmental protection and management.
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>	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.
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 	<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 To exploit the opportunities for built and archaeological heritage to demonstrate value and secure resources 	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.

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"> • Reduce the vulnerability of built and archaeological heritage to climate change • Identify and capitalise on the various potential opportunities for the sector. 		
Heritage related legislation: <ul style="list-style-type: none"> • National Monuments Act 1930 as amended; • Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999; and • The Heritage Act 2018. 	Irish Heritage regulations that are relevant to the LACAPs. Broadly, this legislation is designed to conserve and enhance heritage.	Irish Heritage regulations that are relevant to the LACAPs. Broadly, this legislation is designed to conserve and enhance 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.
All-Island Strategic Rail Review	The Review aims to inform policy and future strategy for the railways in both jurisdictions on the island of Ireland.	<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 achieve economic and financial feasibility. 	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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Ireland's 4th National Biodiversity Action Plan 2023 - 2030	Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature.	<p>It will continue to implement actions within the framework of five strategic objectives, while addressing new and emerging issues:</p> <ul style="list-style-type: none"> • Objective 1 - Adopt a Whole of Government, Whole of Society Approach to Biodiversity • Objective 2 - Meet Urgent Conservation and Restoration Needs • Objective 3 - Secure Nature's Contribution to People • Objective 4 - Enhance the Evidence Base for Action on Biodiversity • Objective 5 - Strengthen Ireland's Contribution to International Biodiversity Initiatives 	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.
Regional/ County/Local Level			
Regional Economic and Spatial Strategies	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>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,</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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<p>Clare County Council, Limerick City and County Council, 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>	
Regional Development Strategy 2035 (Northern Ireland)	<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. • This Plan may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery. 	Aims to provide long-term policy direction with a strategic spatial perspective.	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.
Greater Dublin Area (GDA) Transport Strategy (2022-2042)	<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. 	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
		<ul style="list-style-type: none"> • 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 World. Access to and through the GDA will continue to be a matter of national importance. • 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. 	
Transport Strategy for the Cork Metropolitan Area 2040	<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>

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Greater Dublin Area Cycle Network Plan	<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 the whole European continent. Two of these routes are in Ireland • including EV2 from Galway through Dublin to London, Berlin, Warsaw and Moscow. • 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>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 ports • The Green Route Network being cycle routes for development of tourist, recreational and leisure purposes. 	<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>
Dublin to Galway Greenway Plan	<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>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>

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"> This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery. 		
Local Transport Plans and Strategies	<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 the active travel infrastructural development. To encourage modal shift. 	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.
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.
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 	<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. 	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
	<ul style="list-style-type: none"> 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"> These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites. 	regulatory framework for environmental protection and management.
Groundwater Protection Schemes	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.	A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable 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.
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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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 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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
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 increase 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 Management Plans	<ul style="list-style-type: none"> • Identifies the current status of the species and the reason for loss or decline. • Identifies measure required to improve or restore current status. 	<ul style="list-style-type: none"> • Identifies pressures on Freshwater Pearl Mussels for each of the designated populations in Ireland. • Outlines restoration measures required to ensure favourable conservation status. 	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
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 achievement of the objectives of the regulatory framework for environmental protection and management.

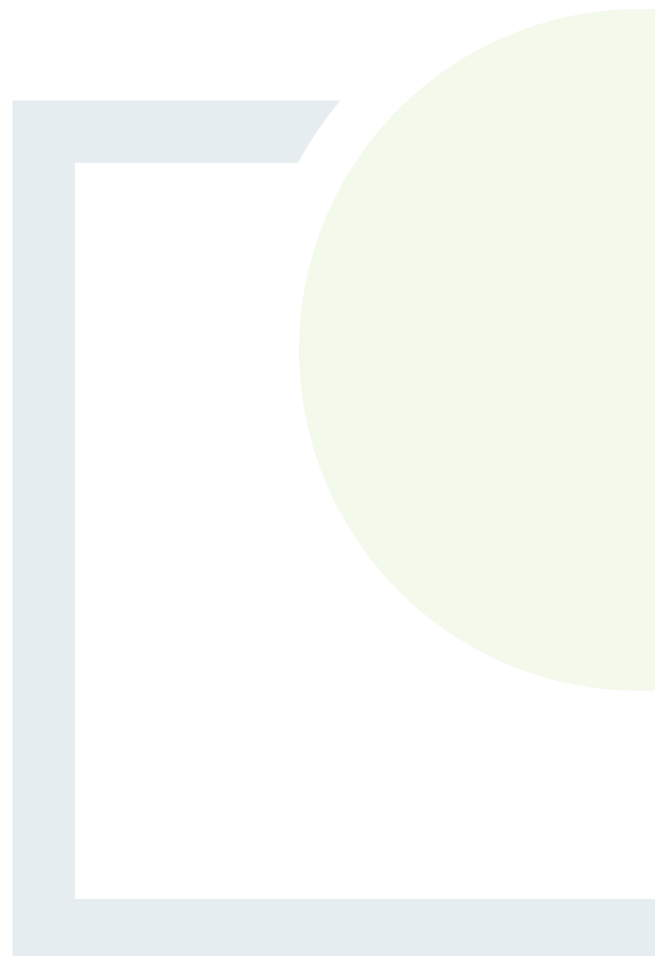
Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Noise Action Plans	<p>The Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise.</p> <p>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>	<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 	<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>



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 2

Scoping Consultation
Feedback



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.

By email to: climateactionoffice@kildarecoco.ie

Ms Paula O'Rourke
Climate Action Coordinator
Kildare County Council
Áras Chill Dara
Devoy Park
Naas
Co. Kildare
W91 X77F

30th August 2023

Our Ref: SCP230813.1

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

Dear Ms O'Rourke,

We acknowledge your notice, dated 22nd August 2023, in relation to the Kildare 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 Kildare 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-

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

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 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 Eastern and Midlands 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/>.

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 Eastern and Midlands 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/



Kildare County Council
Devoy Park
Naas
Co. Kildare, W91 X77F

31 August 2023

Re: Kildare County Council Climate Action Plan 2024-2029

Your Ref: n/a

Our Ref: 23/240

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 25 August 2023, concerning the Kildare 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 Kildare was completed in 2005. 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.

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.

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/
Geohazards	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=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Bedrock geology:	Land & Soils	Regional	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Quaternary geology: Sediments	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Quaternary geology: Geomorphology	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&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=afa76a20fc54877843aca1bc075c62b
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=a2718be1873d47a585a3f0415b4a724c
Goldmine	Historical data sets including geological memoirs and 6" to 1 mile geological mapping records	Land & Soils/Water	National	available online	https://secure.dcaa.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; turlough 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=9eae46bee08de41278b90a9916dc0b9e
Marine & Coastal Unit	INFOMAR - Ireland's national marine mapping programme; providing key baseline data for Ireland's	Water	National		https://secure.dcaa.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?zasting=7&northing=7&lid=EPA:LEMA_Facilities_Extractive_Facilities
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:

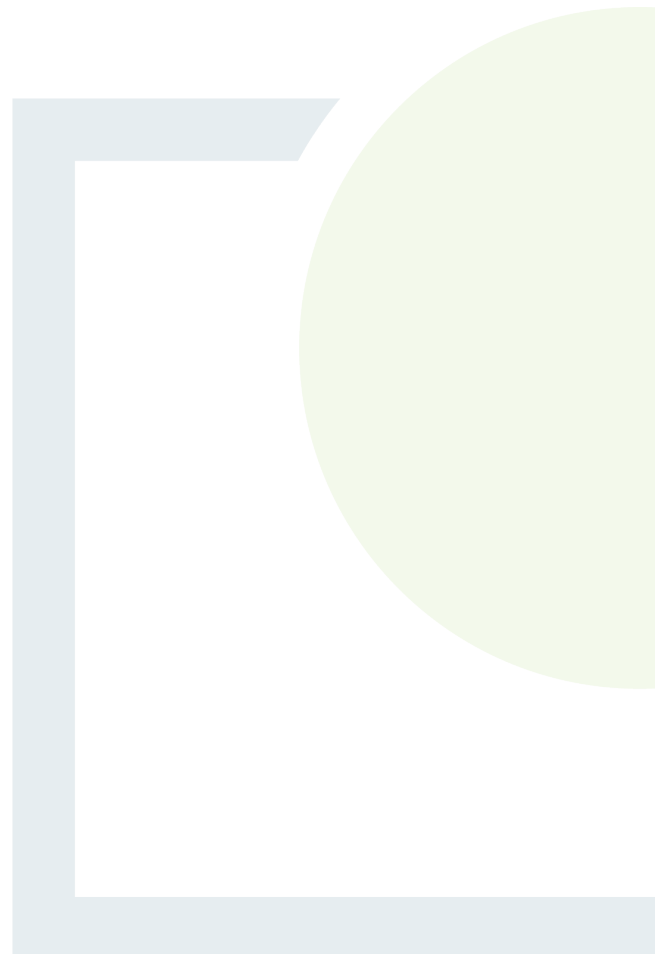
- The maps and data listed above are available on the Geological Survey Ireland map viewer <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>
- Please read all disclaimers carefully when using Geological Survey Ireland data
- Geological Survey Ireland and Irish Concrete Federation published 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 Plan
Implementation



Appendix 3.1 - Approach and Methodology for the Detailed Evaluation of Environmental Effects of Plan 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 Theme Area in the LACAP. LACAP Actions associated with that Theme 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 Theme 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 categorized as follows:

- Potential Positive Environmental Impact (indicated in the matrix by a '+').⁷⁰
- Potential Negative Environmental Impact (indicated in the matrix by a '-').⁷¹
- 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, cumulative⁷², synergistic⁷³, 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 Theme Area are presented in Appendix 3.2.

⁷⁰ Potential Positive Environmental Impacts are defined as having the potential to support the achievement of an SEO.

⁷¹ Potential Negative Environmental Impacts are defined as having the potential to hinder the achievement of an SEO.

⁷² The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

⁷³ 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. ⁷⁴
	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 minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, 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.
	W5	Prevent impact upon drinking water quality.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.

⁷⁴ '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
	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	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 Plan Implementation

Governance & Leadership

[illegible]

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
1.5	Support CARO to develop a targeted training plan to support relevant Council staff on the requirements for sustainable design, green procurement, low carbon construction methods, biodiversity, water conservation, reuse of existing buildings, etc.	This education/awareness related action will underpin and support the effective delivery of climate action in the local authority by promoting awareness of relevant sustainability and climate related matters. The adoption of this action will support the full realization of the vision and main objectives of the plan in the local authority organization.	0	+	0	0	0	0	0	0	+	0	+
1.6	Create and support formal linkages between key community, business and education bodies to facilitate collaborative climate action within the County.	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.	0	0	0	0	0	0	0	0	0	0	+
1.7	Embed climate considerations in budgeting process and accommodate trade off on budgetary constraints, to be an exemplar in green procurement such as through specifying low carbon methods and materials in construction. Consider testing a construction Circular Economy public procurement training clause in the tendering process utilising BUSGoCircular.	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, including positive effects on the climate environment and other environmental co-benefits.	0	+	0	0	0	0	0	0	+	0	+
1.8	Promote best practice climate action case studies within the County including those for both mitigation and adaptation initiatives and infrastructure.	<p>This education/awareness related action will underpin and support the effective delivery of climate action in the local authority by promoting awareness of relevant sustainability and climate related matters. The adoption of this action will support the full realization of the vision and main objectives of the plan in the local authority organization.</p> <p>The mitigation and adaptation initiative supported may lead to slight to significant, positive effects on the climate and water environments</p>	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
1.9	Collaborate with other local authorities, government departments and agencies on the implementation of this Plan to create a joined up and consistent approach such as through Climate Adaptation Planning which should be developed with other local authorities that share a river catchment.	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	+
1.10	Prepare and apply a protocol to enable and require a pre-set standard for 'Climate Proofing' including energy efficient, accessible and water sensitive urban design of all local authority led capital plans, purchases and investment for example; projects funded under the Outdoor Recreation Scheme, Active Travel Scheme, Urban Regeneration and Development Fund etc.	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. 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.	0	0	0	0	0	0	0	+	0	0	+
1.11	Update the Kildare County Council Major Emergency Plan to ensure that all climate change risks to the human, natural and built environment (including heritage) are suitably addressed and a resilient response is available.	This action has potential to support improving the effectiveness of major emergency response plans implemented in response to flood events. The action will generate a positive effect for environmental receptors that are at risk of being negatively impacted by flood events - by reducing the risk of such flood events.	+	+	0	+	0	+	0	0	0	0	+

Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape & 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 & Transport

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.1	Ensure that all affordable homes made available for purchase or for rent by the Council under Housing for All have a Building Energy Rating of B2 as a minimum.	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	+
2.2	Promote the Midlands Retrofit Programme to ensure that existing council-owned houses are retrofitted to a minimum Building Energy Rating of B2 (or to a cost-optimal level).	<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>This action may support refurbishment or retrofitting of housing stock. There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p>	0	-	0	-	0	0	+/-	0	0	0	+
2.3	Promote the National Retrofitting Scheme to private householders to highlight the package of supports to make it easier and more affordable for homeowners to undertake home energy upgrades.	<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>This action may support refurbishment or retrofitting of housing stock. There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p>	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
2.4	Communicate details of case studies and guidance on the upgrade of traditional building to promote as exemplar.	<p>This is a study/communication based action. The development of such case studies and guidance will serve to guide others in upgrading and retrofitting traditional buildings to ensure they are climate resilient and more energy efficiency, thus creating positive cultural heritage protection and climate related effects.</p> <p>An opportunity exists to ensure these guidelines support the protection of such traditional buildings and other environmental sensitivities that may be impacted during retrofitting works, such as Bats which may be present in old unused buildings.</p>	0	0	0	+	0	0	0	0	0	0	+
2.5	Develop projects to promote adaptive reuse of historic structures - using exemplar retrofitting projects and carbon budgets to demonstrate climate value and publish relevant case studies.	<p>This action has the potential to have significant positive effects on cultural heritage and architectural assets and the amenity value attained by people from these assets.</p> <p>This action has the potential to support carrying out retrofitting/upgrade works at historic structures and traditional buildings 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	+
2.6	Build climate resilience and improve energy performance of architectural and archaeological heritage in public and private ownership through schemes such as the Built Heritage Investment Scheme, Historic Structure Fund, Historic Towns Initiative, Irish Walled Towns Network and Community Monuments Fund.	<p>This action has the potential to have significant positive effects on cultural heritage and architectural assets and the amenity value attained by people from these assets.</p> <p>This action has the potential to support carrying out retrofitting/upgrade 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	+

[illegible]

[illegible]

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	development shall be assessed along with recommendations for mitigation of impacts on at risk development sites.												
2.12	Identify roads and streets within the County that are suitable for road space reallocation. Prioritise roads and streets currently or likely to be used by public potential town bus services. Work towards ensuring network options are developed between active travel options and public transport routes.	<p>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> <p>The delivery of expanded sustainable/active travel networks has the potential to promote the use of sustainable and active 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>	+	-	0	0	0	0	+/-	-	0	0	+
2.13	National Sustainable Mobility Policy to increase provision of park and ride/share at transport interchanges and community hubs and support the development of Town Bus Services and park and ride/share locations to maximise connectivity for the highest number of residents.	<p>The development of infrastructure associated with transport mobility hubs may result in negative construction related environmental effects, including effects on water quality, Biodiversity, European sites and local noise, dust and traffic related effects.</p> <p>The delivery of expanded sustainable/active travel networks has the potential to promote the use of sustainable and active 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>	+	-	0	0	0	0	+/-	-	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.14	Develop a Pedestrian Enhancement Plan [LK1] [LK2] for the regional growth centres and key towns prioritising connectivity to public.	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	+
2.15	Develop and publish a cycle network plan [LK3] for the County. Where possible, ensure the cycle network is planned on the principle of 'origin and destination' that prioritises connectivity to places of education, employment and public. Develop secure bike / mobility parking options that aligns to route options and trip attractor locations.	<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 active travel 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 active networks may have a slight to significant effect on traffic flows associated with other modes of transport, in absence of proper design of such networks at the outset and additional mitigation as may be required.</p> <p>The delivery of an expanded, safe active travel network has the potential to have a significant positive effect on population and human health through the promotion of modes of travel that benefit human health.</p> <p>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 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>	+/-	-	0	-	-	0	+/-	-	+/-	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.16	Expand the greenway network in the County establishing linkages with towns and villages in line with the strategic national cycle network and avoid locating greenways in sensitive natural/biodiversity areas.	<p>In the absence of any mitigation, works involved in the construction of greenway 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 development of such networks could lead to habitat fragmentation, resulting in negative effects of biodiversity, flora and fauna, and important habitats.</p> <p>The delivery of an expanded, safe active travel network has the potential to have a significant positive effect on population and human health through the promotion of modes of travel that benefit human health.</p> <p>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 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>Establishing linkages between towns and villages has the potential to maximise these benefits.</p> <p>The delivery of high quality greenway infrastructure has the potential to lead to significant tourism and recreation benefits.</p>	+/-	-	0	-	-	0	+/-	-	+/-	+	+
2.17	Prioritise a model for bike share schemes and micro mobility options (including the potential for electric bikes) in regional growth centres and key towns[LK4] .	This action will promote the use of active travel 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 docking stations are unlikely to lead to any significant environmental impact.	+	0	0	0	0	0	+	0	+		+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	Provide key docking locations such as places of education, employment recreation and public. Investigate potential of coordination of such schemes through the TFI Local Link Transport Coordination Unit (TCU).												
2.18	Deliver the Pathfinder Projects identified for County Kildare under the National Sustainable Mobility Policy such as the Naas Mobility Network Integration and Energy Performance and Building Directive initiatives.	<p>This action will support the reduction/offset 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 action may support development or the refurbishment or retrofitting of buildings. There is the potential for a variety of slight to potentially significant environmental impacts during construction or refurbishment/retrofitting projects. Retrofitting works may also negatively affect the appropriate conservation of protected structures.</p>	0	-	0	-	0	0	+/-	0	0	0	+
2.19	Support the planning and implementation of a programme of improved town bus services and commence delivery of an enhanced bus stop and bus shelter programme for regional and rural services.	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.	0	0	0	0	0	0	+	0	+	0	+
2.20	Support the Connecting Ireland Rural Mobility Plan to ensure that the public transport network encourages and supports changes in demand for transport, improves regional connectivity and provides an enhanced alternative to the private car.	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.	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
2.21	Develop an Electric Vehicle Network Plan to identify charging points including high powered charging hubs across the County.	<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 across the extent of the local authority's functional area.</p> <p>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), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.</p> <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>	0	-	0	-	-	0	+/-	-	0	0	+
2.22	Promote and implement the Safe Routes to School Programme to create safer walking and cycling routes within communities, alleviate congestion at the school gates and increase the number of students who walk or cycle to school by providing safe infrastructure.	<p>This action has the potential to encourage modal shift and the use of active travel networks. This action supports the development of additional pedestrian and cycling infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of additional pedestrian or cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts (due to construction plant operation), 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	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<p>This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.</p> <p>The action has the potential to have a positive impact on population and human health by reducing traffic risk at schools.</p>											
2.23	Revise working practices within the Council to ensure that 20% of resource hours can achieve remote working as per the National Remote Work Strategy.	This action will likely promote a 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	0	+
2.24	Establish a comprehensive and integrated network of remote working hubs throughout the County to support remote working and reduce commuter travel in line with the National Remote Work Strategy and Kildare Hub Strategy.	<p>This action will likely promote a 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.</p> <p>If inappropriately located or planned, the establishment of such hubs may lead to localised traffic and transport impacts, such as congestion.</p>	0	0	0	0	0	0	+	0	+/-	0	+

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Natural Environment & Green Infrastructure

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.1	Develop Green Infrastructure Plan (as defined by the EU as 'A strategically planned network of natural and semi-natural areas with other environmental features, designed and managed to deliver a wide range of ecosystem services, while also enhancing biodiversity') including a green infrastructure network for the County that incorporates climate change mitigation and adaptation to increase climate resilience.	<p>This action will promote the protection and further development of green infrastructure. The protection and development of green infrastructure has the potential to have wide ranging slight to very significant positive effects on biodiversity, and slight to significant positive effects on tourism and recreation amenity and water quality and hydrology.</p> <p>Green infrastructure can also support GHG sequestration leading to a slight positive effect on the climate environment.</p> <p>In absence of appropriate design and mitigation, the development of green infrastructure could potentially result in negative environmental effects, including negative construction related effects, negative effects on biodiversity or negative effects on cultural heritage assets.</p>	0	0	0	0	0	0	0	+	+	+	0
3.2	Identify all local authority land, carry out ecological/habitat survey and highlight areas at risk and those suitable for restoration and enhanced carbon storage, also identifying potential wildlife corridors for protection through statutory plans.	<p>This action has the potential to lead to slight to significant positive effects on biodiversity, flora, fauna and important habitats, and slight positive effects on the climate environment.</p>	0	+	0	0	0	0	0	0	0	0	+
3.3	Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity and water quality levels in keeping with the 'All Ireland Pollinator Plan' and as part of this to develop and implement pesticide reduction policy for lands and areas managed by the Council.	<p>This action has the potential to lead to slight to significant positive effects on biodiversity, flora, fauna and important habitats and water quality, and slight positive effects on the climate environment.</p> <p>Limiting and regulating the use of herbicides and pesticides would prevent to some degree the occurrence of environmental pollution incidents due to the use of these substances.</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 negative environmental effect of the continued use of such substances is potentially significant, given the hazardous properties of these substances.											
3.4	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 action has the potential to have wide ranging slight to moderate significant effects on local biodiversity, and slight to significant 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. Inappropriate or improper hedgerow or riparian area maintenance could lead to negative environmental impacts on biodiversity and flora and fauna species present in such hedgerows.	0	+	0	0	0	0	+	0	0	0	+
3.5	Support existing citizen science initiatives including those focusing on water quality through the National Biodiversity Data Centre biodiversity recording through training of public/stakeholders and publicising schemes and resources.	This action has the potential to generate some degree of positive effects on climate and biodiversity	0	+	0	0	0	0	0	0	0	0	+
3.6	Commission the 'Local Authority County Wetland Survey', develop a Wetland Restoration Plan, this shall identify priority areas for habitat restoration, carbon capture and water and biodiversity benefits, along with phasing for restoration.	This action will promote good flood risk management and flood risk reduction. The proper management of flood water storage systems will generate a positive effect for environmental receptors that are at risk of being negatively impacted by flood events - by reducing the risk of such flood events. This action also has the potential to generate climate and biodiversity related benefits. Restoration works, if carried out improperly or inappropriately, could potentially impact or impinge on important habitat or species present at lakes and wetland, resulting in slight to significant environmental impacts. Such works could potentially impact on water quality also.	+	+/-	0	+	0	0	0	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.7	The Council will seek to prioritise the delivery of Catchment Flood Risk Assessment and Management Programme identified flood schemes in the county and promote nature-based solutions and integral to these schemes.	<p>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.</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; 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> <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 human receptors, ecological receptors and cultural heritage assets.</p>	+/-	+/-	0	+	0	0	-	+/-	0	0	+
3.8	Develop integrated programme to address Invasive Alien Species.	This action has the potential to lead to positive effects on biodiversity.	0	+	0	0	0	0	0	0	0	0	0
3.9	Develop a plan of action to protect, conserve and enhance the wetlands identified in the County Kildare Wetland Survey 2012-2014.	This action will promote good flood risk management and flood risk reduction. The proper management of flood water storage systems will generate a positive effect for environmental receptors that are at risk of being negatively impacted by flood events - by reducing the risk of such flood events.. This action also has the potential to generate climate and biodiversity related benefits.	+	+/-	0	+	0	0	0	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		Restoration works, if carried out improperly or inappropriately, could potentially impact or impinge on important habitat or species present at lakes and wetland, resulting in slight to significant environmental impacts. Such works could potentially impact on water quality also.											
3.10	Prepare guidance document and training on quality rating and management prescription of hedgerows in open space for Council staff and developers	<p>This action has the potential to have wide ranging slight to moderate significant effects on local biodiversity, and slight to significant 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.</p> <p>Inappropriate or improper hedgerow maintenance could lead to negative environmental impacts on biodiversity and flora and fauna species present in such hedgerows.</p>	0	+	0	0	0	0	+	0	0	0	+
3.11	Support the Green Schools and Heritage in Schools programme to promote biodiversity and climate issues to schools.	This action will support the promotion of good environmental management at schools and has the potential to generate some degree of positive effects on biodiversity and climate.	0	+	0	0	0	0	0	0	0	0	+
3.12	Develop and implement a Nature-Based Solutions (NBS) and integrated rainwater management protocol for both Council and private sector projects, and to prioritise sustainable drainage systems over conventional systems in line with national guidance parameters.	The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna, climate, and water quality and hydrology.	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	Carry out a review of Section 4 Discharge to Water Licences to determine if they are fit for purpose to meet projected climate change related risks such as hydrological changes and water temperature increases.	This action is administrative in nature and will have no real environmental effect when considered in isolation. The action could lead to the updating of effluent discharge licences in a manner that ensures the adoption of better environmental quality standards and results in positive effects on water quality and hydrology.	0	0	0	0	0	0	0	+	0	0	+
3.14	Devise a county tree management plan which seeks to retain existing trees, support the planting of trees and identify sites for large scale native and mixed woodland planting. Set targets to maintain existing and plant new native trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Increase range of edible native provenance locally sourced fruits, flowers and vegetables in Council Parks, rooftops and open spaces.	This action has the potential to have wide ranging slight to moderate significant effects on local biodiversity, and slight to significant 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
3.15	Deliver the enhanced rehabilitation of former industrial peatlands within the County in line with Irelands National Recovery and Resilience Plan.	This action will have a moderate to significant positive effect on climate action, biodiversity, and environmental/ecosystem health. Such a project, if not appropriately designed or implemented, has the potential to have unintended adverse environmental effects, including effects on water quality and hydrology, biodiversity, European sites, the soils environment land use and sensitive human receptors.	0	+	+	0	+	+	0	+	0	+	+
3.16	Engage with Bord na Móna to explore the appropriate and sensitive diversification of former cutaway peatlands and development of alternative uses such as rewetting and	This action has the potential to support peatland restoration, which could result in moderate to significant positive effects for climate action, biodiversity, and environmental/ecosystem health.	0	+	+	0	+	+	0	+	0	+	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	recreational facilities under the brown to green agenda under the National Strategy on Outdoor Recreation.	Supported projects, if not appropriately designed or implemented, has the potential to have unintended adverse environmental effects, including effects on water quality and hydrology, biodiversity, European sites, the soils environment land use and sensitive human receptors.											
3.17	Engage with Bord na Móna to develop a Green Infrastructure Masterplan to inform the delineation of core areas, steppingstones and corridors to support the development of the Bog of Allen Nature Reserve, Special Amenity Area Order and/or National Peatlands Park.	<p>This action has the potential to support restoration of nature areas and peatlands, which could result in moderate to significant positive effects for climate action, biodiversity, and environmental/ecosystem health.</p> <p>Supported projects, if not appropriately designed or implemented, has the potential to have unintended adverse environmental effects, including effects on water quality and hydrology, biodiversity, European sites, the soils environment land use and sensitive human receptors.</p>	0	+	+	0	+	+	0	+	0	+	+
3.18	Support farmers in the shift toward a low-carbon and climate resilient agriculture sector in County Kildare including the diversification of farming practices to increased tillage or alternative land uses.	This action will support the reduction of agricultural sector GHG emissions. 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	+
3.19	Support and promote the Signpost Advisory Programme to support climate and sustainability actions on farms.	This action will support the reduction of agricultural sector GHG emissions. 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	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.20	Promote the shift to organic farming within the County.	This action will support the reduction of agricultural sector GHG emissions. 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	+
3.21	Support farmers in reducing chemical nitrogen fertiliser use by 20% by 2030, increasing the use of protected urea and increasing the uptake of low emission slurry spreading to 90% of farms.	This action has the potential to lead to reduced 'managed soil' related GHG emissions. In addition, this action has the potential to reduce the impact nitrogen fertilizer use is having on the water environment, and the biodiversity environment, including aquatic ecology.	0	+	0	0	0	0	0	+	0	0	+
3.22	Provide technical supports to farming enterprises in the development of biomethane from Anaerobic Digestion.	The development of AD facilities has the potential to offset GHG emissions associated with fossil fuel based energy sources. The development of such facilities have the potential to create unintended localized, negative environmental impacts, including nuisance or odour related impacts, landscape or visual amenity impacts, or impacts on water quality.	0	0	-	0	-	0	-	-	0	0	+
3.23	Promote innovative solutions in the agri-food sector to reduce the carbon intensity of agri-food products on Kildare farm enterprises.	This action will support the reduction of agricultural sector GHG emissions. 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.	0	0	0	0	0	0	0	0	0	0	+
3.24	Develop pesticide use policy for the County.	Limiting and regulating the use of herbicides and pesticides would prevent to some degree the occurrence of environmental pollution incidents due to the use of these substances. The negative environmental effect of the continued use of such substances is potentially significant, given the hazardous properties of these substances.	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
3.25	Support farmers in reducing the crude protein content of animal feed, increasing the focus on low-methane traits within animal breeding programmes and encouraging processors and farmers to reduce the average age of slaughter to 24 – 25 months from the current average of 26.5 months.	This action will support the reduction of agricultural sector GHG emissions. 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.	0	0	0	0	0	0	0	0	0	0	+

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Communities: Resilience & Transition

[illegible]

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5	Encourage a community response to enable biodiversity and water conservation in the community, in association with groups such as the 'Tidy Towns,' through innovative measures such as competitions, events and training.	This promotional action will underpin and support the effective delivery of climate and sustainability action in the 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	0	0	0
4.6	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' through a nominated lead, working with the CARO and GAA, in the promotion and support of projects by participating clubs, to meet the objectives, and during key phases, of the programme to 2029.	<p>This promotional/engagement action will underpin and support the effective delivery of climate action in the GAA 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.</p> <p>This action will support the promotion of good environmental management at GAA Clubs 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	+
4.7	Support artists, organisations and communities to consider and adopt best practice in their work with regard to global challenges such as climate, water, environment, mobility and biodiversity and maximise the library network, educational resources and planning.	This promotional/engagement related action will underpin and support the effective delivery of climate action in the arts 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	0	0	0
4.8	Ensure the continued incorporation of Flood Risk Management and Climate Change Sectoral Adaptation Plans into the spatial planning of the County to meet the requirements of the EU Floods Directive and	<p>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.</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</p>	+/-	+/-	0	+	0	0	-	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	the EU Water Framework Directive and to promote a climate resilient County.	<p>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> <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 human receptors, ecological receptors and cultural heritage assets.</p>											
4.9	Implement all Area Specific Recommendations presented in the Strategic Flood Risk Assessment for the Kildare County Development Plan 2023-2029.	<p>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.</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; 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> <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</p>	+/-	+/-	1	+	0	0	-	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<p>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 human receptors, ecological receptors and cultural heritage assets.</p>											
4.10	Require all new development within the County to comply with the requirements of Sustainable Urban Drainage Systems as a minimum and to promote the development of nature based solutions such as green roofs, ponds, wetlands and shallow vegetated channels (swales).	This action has the potential to lead to positive impacts on water quality and hydrology and biodiversity mainly.	0	+	0	0	0	0	0	+	0	0	0
4.11	Showcase good examples of Sustainable Urban Drainage Systems which maximise amenity and biodiversity through the use of nature based systems such as swales or rain gardens as part of the Councils developments.	This is a promotional action which will not have any real environmental effect in isolation. It has the potential to promote the development of SuDS and the realization of SuDS related benefits.	1	+	0	0	0	0	0	+	0	0	0
4.12	Resolve local flooding issues utilising OPW and Department of Transport funding (Drainage programme, Climate Adaptation and Resilience Works, OPW Minor Works Scheme) incorporating Sustainable Urban Drainage Systems.	<p>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.</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; 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>	+/-	+/-	1	+	0	0	-	+/-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<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 human receptors, ecological receptors and cultural heritage assets.</p>											
4.13	Support and inform a climate proofing programme for natural water resources, and to better manage flooding at the catchment level, the Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk.	This is a supportive action and will not have any real environmental effect in and of itself. The completion of such assessments however will underpin and support flood defence strategy going forward however. The study has the potential to lead to further action that could have very significant environmental effects, including effects water quality and hydrology, biodiversity, European site or sensitive human receptors.	+	0	0	+	+	0	0	+	0	0	0
4.14	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 action is not likely to have any environmental effect when considered in isolation. It will, however, provide vital information that has the potential to support Kildare, and Ireland, in its effort towards realising the goals set out under the Water Framework Directive. If followed-up with meaningful action, this could benefit human health, biodiversity, soil, water, and tourism/recreation.	0	0	0	0	0	0	0	0	0	0	0
4.15	Carry out a 'Tree Cover Survey and Policy' on lands managed by the Council, in accordance with an agreed methodology.	This action has the potential to lead to positive effects on the climate environment, by promoting GHG emission sequestration.	+	+	+	0	+	+	+	+	0	+	+

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	adaptation measures during drought conditions.												
4.18	Implement the Local Just Transition Plan for West Kildare to support and advance sustainable social, economic, and environmental development in the transition to a low carbon future in the West Kildare region.	<p>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 West Kildare Region.</p> <p>This plan supports the development of renewable energy development and building retrofits in the West Kildare region that could have a variety of slight to potential significant negative environmental effects, including noise, landscape and visual, cultural heritage, and biodiversity impacts.</p>	+	0	0	0	0	0	0	0	0	0	+
4.19	Support the programme for a free energy report for householders in the Just Transition area to provide advice on options for retrofit and free support for accessing grants such as the 'better energy communities' and 'national retrofit' grants.	<p>This action will have no environmental effect in and of itself. It may lead to increased instances of retrofitting and energy upgrading in West Kildare houses which will support the reduction 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. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p>	0	0	0	0	0	0	0	0	0	0	+
4.20	Support Just Transition projects with a climate focus, such as the Midlands Bioenergy Development Project within the County.	This is an action that serves to promote the development of renewable bio-energy projects. Such action has the potential to lead to a reduction in GHG emissions associated with fossil fuel combustion and result in positive effects on the climate environment.	0	-	-	0	-	+	+/-	-	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The supporting of such developments could result a variety of slight to significant negative environmental effects, including traffic impacts, odour impacts, landscape and visual impacts and negative impacts on sensitive habitats and species, including European sites - thus further consideration and mitigation measures are required.											
4.21	Support innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including those addressing climate change and sustainability.	This action has the potential to have some degree of positive climate and sustainability related effects.	0	0	0	0	0	0	0	0	0	0	+
4.22	Explore the creation of local authority apprenticeship programme in use of traditional materials and skills to assist in carrying out conservation of traditional structures to increase their climate resilience and raise awareness of the importance of traditional skills and materials.	This action has the potential to benefit cultural heritage and protect buildings and structures of architectural importance against damage caused by more severe climate-related weather events. Potential negative effects may be seen during maintenance works on such areas as biodiversity (any nesting birds/bats) and, depending on the nature of the works involved, on the receiving environment; soils, water, air quality (due to soil displacement, runoff, and dust)	0	-	0	+	-	0	-	-	0	0	0
4.23	Organise capacity building training on all aspects of climate and biodiversity for community groups and internal staff, including sharing of experiences and use of exemplar projects and demonstration sites.	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	+

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Sustainability & Resource Management

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
5.1	Prepare and implement an overall Renewable Energy Strategy for the County that is informed by the national Renewable Electricity Spatial Policy Framework to support sustainable development of onshore wind and solar within the County.	This is an action that serves to promote the development of renewable energy projects. The supporting of such developments could result a variety of slight to significant negative environmental effects, including landscape and visual impacts and negative impacts on sensitive habitats and species, including European sites - thus further consideration and mitigation measures are required.	0	-	-	0	-	+	+/-	-	+	0	+
5.2	Implement the Kildare County Council Wind Energy Strategy.	This is an action that serves to promote the development of renewable energy projects. The supporting of such developments could result a variety of slight to significant negative environmental effects, including landscape and visual impacts and negative impacts on sensitive habitats and species, including European sites - thus further consideration and mitigation measures are required.	0	-	-	0	-	+	+/-	-	+	0	+
5.3	Support local community-based renewable energy projects and new micro-generation and small-scale generation renewable energy projects.	This is an action that serves to promote the development of renewable energy projects and lower GHG emissions produced within the County. The supporting of such developments could result a variety of slight to significant negative environmental effects, including landscape and visual impacts and negative impacts on sensitive habitats and species, including European sites - thus further consideration and mitigation measures are required. The development of PV panels on buildings has the potential to result in negative glint and glare impacts on sensitive environmental receptors.	0	-	-	0	-	+	+/-	-	+	0	+
5.4	Support ongoing expansion and improvements to the electricity grid infrastructure within the	This action serves to facilitate the expansion of renewable energy within the County, thereby contributing to the County's potential to reduce GHG emissions generally.	0	-	0	-	0	0	+/-	-	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	County to support renewable generation and supply.	Potential negative environmental effects to soil, air quality, noise, and water may arise from any related construction/maintenance work at sites.											
5.5	Develop an Electricity Demand Management Plan for all Council owned buildings and sites to measure existing electricity use and target appropriate measures and reductions.	This action will provide important data that can be used to support overall GHG emission lowering in Council-owned buildings. The plan will not have any real environmental effects in and of itself.	0	0	0	0	0	0	0	0	0	0	+
5.6	Undertake a feasibility study on integrating solar photovoltaic at Kildare County Council owned car parks and on the roof tops of publicly owned buildings throughout the County.	<p>The assessment process associated with this action will not have any real environmental effect when considered in isolation.</p> <p>The action could potentially support the carrying out of renewable energy projects that could generate a range of slight to significant positive environmental effects, including positive effects on climate, water quality, the soils environment and biodiversity.</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 impacts on population and human health (due to solar panel glint and glare), 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	+
5.7	Support Bord na Móna with the redevelopment of the headquarters at Newbridge with a view to promoting the area as a Green Energy Hub.	This action is likely to support the overall vision of the plan through the facilitation of renewable energy development, thereby lowering GHG emissions. It may, however, involve significant construction which could have a range of negative environmental impacts on the receiving environment including landscape and visual amenities, biodiversity impacts, soil and water	0	-	-	0	-	+	-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
5.15	Promote and enable industrial symbiosis between commercial operators to minimise waste and increase circularity.	This action is likely to promote waste management best practices within industry. 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	+

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Maynooth Decarbonising Zone

Governance & Leadership

[illegible]

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
1.7	Collaborate with Maynooth University to align climate action initiatives within the town.	This action is broad and non-specific in nature. The potential environmental effects are dependent on initiatives developed through the collaboration.	0	0	0	0	0	0	0	0	0	0	+
1.8	Implement a monitoring regime and report annually on the implementation of these actions and revise accordingly to tackle emerging climate action priorities.	This action will have no environmental effects in and of itself. It underpins the actions laid out in this plan and works towards the effective implementation thereof.	0	0	0	0	0	0	0	0	0	0	0

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Built Environment & Transport

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
2.1	Undertake a feasibility study of the 10-minute town concept for the future development of the Maynooth area.	This will provide baseline data and, once integrated, the action has the potential to support modal shift and lower GHG emissions in the County. When considered in isolation, it will have no discernible environmental effect.	0	0	0	0	0	0	0	0	0	0	0
2.2	Develop and promote a best practice case study on the Presentation Girls Primary School Energy Retrofit Pathfinder Project.	This will provide baseline data that has the ability to enact some degree of meaningful climate action within the community, with a possibility of lowering GHG emissions. When considered in isolation, it will have no real environmental effect.	0	0	0	0	0	0	0	0	0	0	0
2.3	Engage with educational premises to promote the Climate Action Fund to provide photovoltaic panels (up to 6kW output) in all schools.	<p>The action could potentially support the carrying out of renewable energy projects that could generate a range of slight to significant positive environmental effects in terms of GHG emissions from schools in the County.</p> <p>The development of PV panels on Council roofs has the potential to result in negative glint and glare impacts on sensitive environmental receptors, including Dublin Airport, in the absence of mitigation.</p>	0	0	0	0	0	0	0	0	0	0	0
2.4	Deliver the retrofit of all social housing in the town to achieve a Building Energy Rating B2.	<p>This action will support the reduction 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. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</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
2.5	Promote retrofit to Building Energy Rating B2 or Nearly Zero Energy Buildings for private properties in the commercial and community sector.	<p>This action will support the reduction of private-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. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p>	+	-	0	-	0	0	0	-	0	0	+
2.6	Support Maynooth University in the introduction of new-zero energy student accommodation within walking/cycling distance of the campus.	<p>This action will support the reduction of GHG emissions related to Maynooth University student accommodation. 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/construction works associated with this action. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p>	+	-	0	-	0	0	0	-	0	0	+
2.7	Support remote working through the development of office hubs and co-working spaces in Maynooth to aid in reduced daily commuter travel outside the town.	<p>This action has the potential to lead to the reduction of vehicle related GHG emissions.</p> <p>This action will likely promote a 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.</p> <p>If inappropriately located or planned, the establishment of such hubs may lead to localised traffic and transport impacts, such as congestion.</p>	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
2.8	Prioritise transport policy in Maynooth to support safe active travel (pedestrians and cyclists) and public transport and to discourage private car use within the town (e.g., through car parking charges or car free days).	<p>This action supports active travel and modal shift.</p> <p>The ongoing operation of an active travel and enhanced public transport network may have a slight to significant effect on traffic flows associated with other modes of transport, in absence of proper design of such networks the outset and additional mitigation as may be required.</p> <p>The delivery of an expanded safe active travel network has the potential to have a significant positive effect on population and human health through the promotion of modes of travel that benefit human health.</p> <p>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 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>	+	0	0	0	0	0	+	0	0	0	+
2.9	Promote active travel initiatives in the town to enable greater uptake of walking and cycling with a focus on strategic hubs such as the train station, the university and the town centre. Link with 2.10	<p>These actions supports active travel and modal shift.</p> <p>In the absence of any mitigation, works involved in the construction of additional active travel 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	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<p>The ongoing operation of an active travel and enhanced public transport network may have a slight to significant effect on traffic flows associated with other modes of transport, in absence of proper design of such networks the outset and additional mitigation as may be required.</p> <p>The delivery of an expanded safe active travel network has the potential to have a significant positive effect on population and human health through the promotion of modes of travel that benefit human health.</p> <p>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 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>											
2.10	Enable enhanced access to Maynooth train station, such as through improved footpaths, safe cycle lanes, local bus services, Park and Ride, etc., to maximise the modal shift potential of the local rail network.	This will provide baseline data and, once integrated, the action has the potential to support the climate action in the County. When considered in isolation, it will have no real environmental effect.	+	-	0	0	0	0	+/-	-	0	0	+
2.11	Engage with bus companies to enhance the local bus services through delivery of an appropriately designated bus terminal in the town as well as associated infrastructure for improved bus services both in the town for linkages to other urban centres.	<p>This action supports the provision of adequate facilities to allow for public transport use in place of private vehicles.</p> <p>In the absence of any mitigation, works involved in the development of an enhanced bus terminal and associated 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</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
		<p>(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). The ongoing operation of an enhanced public transport network may have a slight to significant effect on traffic flows associated with other modes of transport, in absence of proper design of such networks the outset and additional mitigation as may be required.</p> <p>This action 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>											
2.12	Support the development of electric vehicle charging points at strategic points in the town and supercharge points and incentives for electric vehicle users.	<p>The development of this strategy has the potential to lead to the development of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the local authority's functional area.</p> <p>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), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.</p> <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</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
		relative to national GHG emission reduction targets and requirements.											
2.13	Work with businesses to promote and implement climate friendly transport options such as last kilometre delivery in the town or HGV ban/restrictions in the town centre.	<p>This action may have a slight to significant effect on traffic flows.</p> <p>This action 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>	0	0	0	0	0	0	+	0	0	0	+
2.14	Undertake a feasibility study to assess the potential for a Park and Ride facility outside of the town centre that would support the reduction of road traffic volumes through the town centre and promote active travel or public transport options as an alternative.	<p>The development of infrastructure associated with transport mobility hubs may result in negative construction related environmental effects, including effects on water quality, Biodiversity, European sites and local noise, dust and traffic related effects.</p> <p>The delivery of expanded sustainable/active travel networks has the potential to promote the use of sustainable and active 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>	0	-	0	0	-	0	+/-	-	+	0	+

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Natural Environment & Green Infrastructure

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.1	Support the creation of shared and connected green spaces in Maynooth town centre.	This action supports biodiversity, human health, recreation/tourism, and is likely to have a slight positive environmental effect in terms of GHG emissions reductions/mitigations.	+	+/-	+	0	+/-	+	+/-	+/-	+	+	+
3.2	Support green infrastructure projects such as those providing linkages to open spaces for biodiversity such as the Carton Avenue Masterplan, the Harbour Field Improvement Works, the Lyreen River, the Rye River, the Royal Canal Greenway or via the Outer Orbital Route.	<p>This action supports the development of additional green infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of such infrastructures 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 delivery of an expanded, safe active travel network has the potential to have a significant positive effect on population and human health through the promotion of modes of travel that benefit human health.</p> <p>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 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 delivery of such green infrastructure has the potential to generate very significant positive tourism, recreation and cultural heritage related benefits/effects.</p>	+	+/-	+	0	+/-	+	+/-	+/-	+	+	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
3.3	Explore the feasibility of the development of allotments and community gardens in Maynooth to support sustainable food production.	This study is likely to have no environmental effects in and of itself. The potential creation of allotments and community gardens has the potential to positively affect human health, biodiversity, recreation, and air quality to some degree.	0	0	0	0	0	0	0	0	0	0	0
3.4	Promote and support a flagship farmers market for local growers of sustainable products.	This action is likely to support local businesses/farmers and promote sustainable farming practices.	0	+	0	0	+	0	0	0	0	0	+
3.5	Develop a landscaping plan for the town to enable the Council, citizens and businesses to coordinate the enhancement of biodiversity and any future native planting in the town.	This action is likely to have no environmental effects in and of itself. The plan will underpin the inclusion of biodiversity-supporting initiatives into future planning activities.	0	+	0	0	0	0	0	0	0	0	0
3.6	Support carbon sequestration through strategic planting of native species for all new developments, underutilised lands or farms to promote biodiversity gain within Maynooth.	This action supports biodiversity and may lead to other positive effects in terms of hydrology and water quality.	0	+	0	0	+	0	+	+	0	0	+
3.7	Enhance green infrastructure in the town to support the development of sustainable urban drainage systems/swales/rain gardens to improve climate resilience.	Ensuring all development appropriately encompasses SuDS/nature based solutions has the potential to result in wide ranging slight to significant positive environmental effects on water quality, hydrology and biodiversity. In the absence of mitigation, the construction of SuDS has the potential to result in some negative environmental effects on water quality (e.g. due to the run-off of soil or cement based material) or biodiversity (due to works impacting on water quality/aquatic ecology), for example.	0	+/-	0	0	0	0	0	+/-	0	0	0
3.8	Promote harvesting of rainwater, reuse of grey water and green roofs and walls on all new developments in the town and	This action promotes water-saving initiatives which may lead to lower GHG emissions. The use of green walls and roofs provides an opportunity for biodiversity enhancement in urban settings in support of the All Ireland Pollinator Plan.	0	+	+	0	0	0	+	+	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	support retrofits that include these measures.	Green roofs and walls may also contribute to higher air quality and offsetting local GHG emissions, whilst also enhancing the urban landscape.											
3.9	Support the agriculture sector in diversifying to sustainable agriculture practices such as the Signpost Programme as well as agritourism and agroforestry practices.	This action has the potential to benefit water quality, biodiversity, and sustainability initiatives in the county.	0	+	0	0	0	0	0	+	0	0	+
3.10	Undertake an assessment to determine the feasibility of allowing the water courses in the town to revert to natural form to mitigate flood risk.	This study is likely to have no environmental effects in and of itself.	0	0	0	0	0	0	0	0	0	0	0

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Communities: Resilience & Transition

[illegible]

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.6	Undertake a feasibility study to develop a low-energy community centre within the town as an information hub.	This promotional/engagement related action will underpin and support the effective delivery of climate action in the community by promoting awareness and understanding of climate action 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	+
4.7	Implement the relevant actions for Maynooth in the Local Just Transition Plan for West Kildare.	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 West Kildare Region.	0	0	0	0	0	0	0	0	0	0	+

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Sustainability & Resource Management

[illegible]

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		Therefore, there is also scope for there to be slight negative effects if unmitigated.											
5.5	Ensure that all Kildare County Council procurement of products and services for Maynooth is fully aligned with the circular economy (e.g. prohibit single-use items) and green public procurement practices.	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	+
5.6	Promote the concept of a sharing, reuse and repair society including waste resource exchanges for key products (tools, toys, etc).	This action is likely to support community engagement and provide an enhanced opportunity for public engagement in and awareness of climate and environmental action. It may result in a slight lowering of GHG emissions locally. Improper waste management has the potential to lead to unintended environmental effects, including water and soil pollution or environmental nuisance related effects.	0	0	0	0	0	0	0	0	0	0	+
5.7	Regulate waste service providers to ensure the rollout of organic waste bins across household, commercial and public collections in Maynooth and explore the option of a community composting bank.	The development and implementation of this action, which aligns with the Draft Waste Management Plan for a Circular Economy, 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	+
5.8	Support the development of sustainable and circular infrastructure to manage organic wastes such as anaerobic digestion or composting in the town.	The development of an Anaerobic Digestion or Composting facility that the action could result in a variety of significant to very significant environmental effects, including potential positive climate and material asset related effects, and potential negative construction or operational effects, including effects on biodiversity, local odour effects, noise effects and traffic and transport related effects.	0	-	0	0	-	0	-	-	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The negative effects of such development could be exacerbated by situating such facilities in the environs of a town and many sensitive environmental receptors.											
5.9	Pilot a mobile segregated recycling centre in Maynooth to allow for the collection of niche items that previously were unable to be recycled in the town. This service would align with other collection days with prior notification.	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. This may also lead to fewer instances of dumping in the surrounding areas which will positively affect landscape, climate, biodiversity, soil, and water quality.	0	0	0	0	0	0	0	0	0	0	+

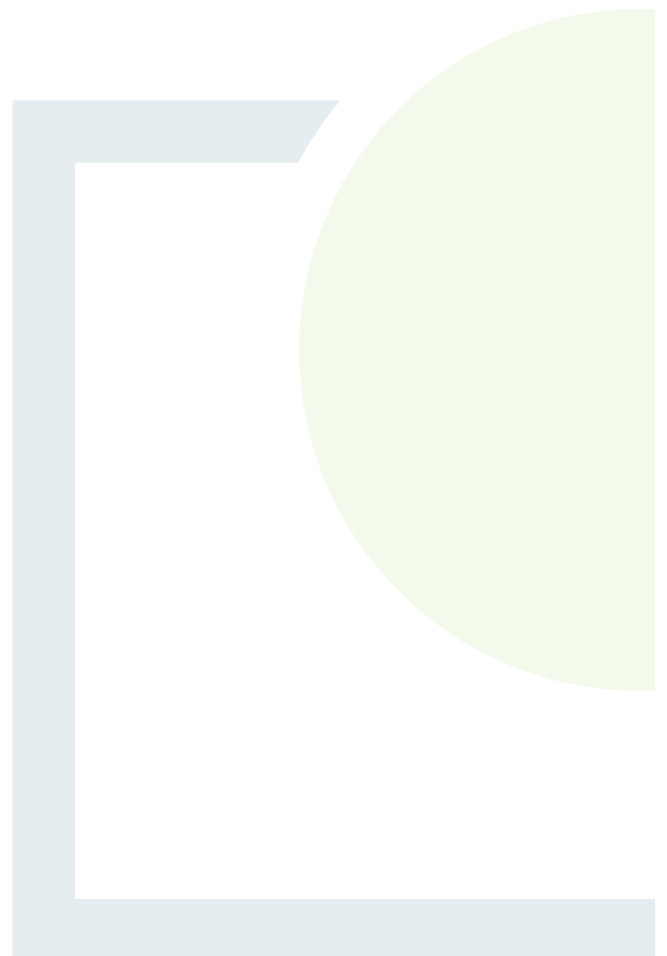
Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape & Visual Amenity. CH - Cultural Heritage - Archaeology & Architectural. S - Soils. LU - Land Use. AQN - Air Quality and Noise. W - Water. MA - Material Assets. TR- Tourism & Recreation. CC - Climate Change.



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APPENDIX 4

SEA Screening Report





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ENVIRONMENTAL SCIENCE &
PLANNING

STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING REPORT

SEA SCREENING REPORT FOR REVISIONS TO THE KILDARE COUNTY COUNCIL LOCAL AUTHORITY CLIMATE ACTION PLAN 2024 - 2029

Prepared for:
Kildare County Council



Kildare County Council
Comhairle Contae Chill Dara

Date: November 2023

Core House, Pouladuff Road, Cork, T12 D773, Ireland

T: +353 21 496 4133 | E: info@ftco.ie

CORK | DUBLIN | CARLOW

www.fehilytimoney.ie

SEA SCREENING REPORT FOR REVISIONS TO THE KILDARE COUNTY COUNCIL LOCAL AUTHORITY CLIMATE ACTION PLAN 2024 -2029

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

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

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1. INTRODUCTION

1.1 Background

This is the Strategic Environmental Assessment (SEA) Screening Report for revisions to the Kildare County Council (KCC) 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 KCC. These submissions were taken into consideration prior to finalisation of the LACAP. KCC have prepared an Observations Report on the submissions received. This document details the submissions received, KCC responses to the submissions, and Plan Action revisions arising following consideration of the submissions.

1.3 Purpose of this Assessment

An SEA Screening Assessment must be carried out on all revisions made to the Draft LACAP Actions arising following consideration of submissions. The purpose of this assessment is to identify whether the Plan Action revisions 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 revisions. This SEA Screening Assessment only considers changes 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 revisions.

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

1. The Kildare County Council LACAP 2024 - 2029.
2. The Draft SEA Environmental Report for the Kildare County Council LACAP 2024 - 2029.
3. The Draft NIR for the Kildare County Council LACAP 2024 - 2029.
4. Kildare County Council LACAP Submissions Observations Report.
5. The AA Screening Report for revisions to Kildare 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 revisions 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 revisions 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 1-1.

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 1-1 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 revisions to the KCC 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 revisions 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 that the Plan Action revisions will not give rise to any adverse 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 Action revisions

This AA Screening Report will also accompany the documented Plan Action revisions.



3. REVISIONS TO THE LOCAL AUTHORITY CLIMATE ACTION PLAN

A summary of Plan Action revisions arising following consideration of consultation submissions is provided in Table 3-1.

Table 3-1 Summary of Plan Action Revisions

Action	Summary of Revision
3.14	The word 'provenance' has been included in the action below: Devise a county native tree management plan which seeks to retain existing native provenance trees, support the planting of native provenance trees and identify sites for large scale native and mixed woodland planting. Set targets to maintain existing and plant new native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Increase range of edible native provenance locally sourced fruits, flowers and vegetables in Council Parks, rooftops and open spaces.
4.15	The word 'provenance' has been included in the action below: Carry out a 'Tree Cover Survey and Policy' on lands managed by the Council, in accordance with an agreed methodology. The study will identify sites for large scale native and mixed woodland planting and set targets for planting and maintaining native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Where possible tree pits should integrate into the surface water drainage to provide water quality benefits.
DZ3.6	The word 'provenance' has been included in the action below: Support carbon sequestration through strategic planting of native provenance species for all new developments, underutilised lands or farms to promote biodiversity gain and ecological connectivity within Maynooth.
5.8	The text 'utilisation of waste heat' has been included in the action below: Require data centres to include strong energy efficiency measures (including demand management, energy efficiency, utilisation of waste heat or auto generation) to reduce operational carbon footprints through the use of sustainable sources of energy generation in the first instance and then the use of renewable sources of energy to power operations, where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.
3.16	The following KPI has been attached to this action: Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order.
3.17	The following KPI has been attached to this action: Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order
2.23	This action has been updated as follows: Revise working practices within the Council to ensure that 40% of resource hours can achieve remote working as per the National Remote Work Strategy.



Action	Summary of Revision
3.3	<p>This action has been updated as follows:</p> <p>Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity and water quality levels in keeping with the 'All Ireland Pollinator Plan' and as part of this to develop and implement pesticide reduction policy for lands and areas managed by the Council with a view to eventually eliminating the use of pesticides. - ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.</p>
1.4	<p>Promote greater community and business engagement on climate action, circular economy, energy, water conservation, sustainable mobility and biodiversity through events such as Earth Hour and the Community Climate Action Officer, Climate Team and support tools to enable the required behaviour change. The LEO will promote Green Micro, Lean programmes, focused Energy Efficiency Briefing Series and capital programmes demonstrating circular economy principles with a focus on SMEs.</p>
3.26	<p>This additional action has been added to the Plan:</p> <p>Explore the feasibility of the development of allotments and community gardens in the County to support sustainable food production.</p>
DZ2.15	<p>This additional action has been added to the Plan:</p> <p>Require that all new large scale development within the County provides a life cycle analysis of carbon impact in line with the standard PAS 2080 Carbon Management In Infrastructure as part of the planning application.</p>
2.25	<p>This additional action has been added to the Plan:</p> <p>Undertake a feasibility study of the potential for district heating or energy within the County, ensuring such a report as appropriate regard to planning and environmental protection considerations.</p>
5.1	<p>This action has been updated as follows:</p> <p>Prepare and implement an overall Renewable Energy Strategy for the County that is informed by the National Planning Framework to support sustainable development of onshore wind and solar within the County, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.</p>
2.19	<p>Support the planning and implementation of a programme of improved town bus services (day and nighttime buses) and commence delivery of an enhanced bus stop and bus shelter programme for regional and rural services. Implement the provision of real-time information regarding bus times at new bus shelters.</p>
2.22	<p>This action has been updated as follows:</p> <p>Promote and implement the Safe Routes to School Programme to create safer walking and cycling routes within communities, enhance school bus services, alleviate congestion at the school gates and increase the number of students who walk, cycle or take the bus to school by providing safe infrastructure. Ensure supported active travel development is carried out in a manner that has due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, existing traffic and transport conditions and amenity value.</p>



3.1 SEA Screening Assessment of Plan Revisions

The following has been considered when carrying out the SEA Screening Assessment of Plan Action revisions 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 revisions.
- The Strategic Environmental Objectives (SEOs) defined in Section 5 of the Draft SEA Environmental Report for the KCC Draft LACAP that the Plan revisions 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 revisions must be considered in relation to the current Draft LACAP which has already been subject to SEA and AA considerations. All Plan Action revisions 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 Revision 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 revisions arising following the Plan/SEA consultation period. These documents have concluded that the neither the Draft LACAP nor Plan Action revisions will not give rise to any adverse effects on designated European sites, alone or in combination with other plans or projects, with the adoption of defined mitigation measures.
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 revisions 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 revisions.	



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 revision has been carried out. This evaluation is presented in Table 4-3.

Table 4-3 Evaluation of Potential Environmental Implications of each Plan Action Revision

Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
3.14	The word 'provenance' has been included in the action below: Devise a county native tree management plan which seeks to retain existing native provenance trees, support the planting of native provenance trees and identify sites for large scale native and mixed woodland planting. Set targets to maintain existing and plant new native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Increase range of edible native provenance locally sourced fruits, flowers and vegetables in Council Parks, rooftops and open spaces.	This amended action supports the maintenance and planting of tree that of native provenance. The amended action will support biodiversity protection and enhancement and promote Greenhouse Gas (GHG) emission sequestration.
4.15	The word 'provenance' has been included in the action below: Carry out a 'Tree Cover Survey and Policy' on lands managed by the Council, in accordance with an agreed methodology. The study will identify sites for large scale native and mixed woodland planting and set targets for planting and maintaining native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Where possible tree pits should integrate into the surface water drainage to provide water quality benefits.	This amended action supports the maintenance and planting of tree that of native provenance. The amended action will support biodiversity protection and enhancement and promote GHG emission sequestration.



Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
DZ3.6	The word 'provenance' has been included in the action below: Support carbon sequestration through strategic planting of native provenance species for all new developments, underutilised lands or farms to promote biodiversity gain and ecological connectivity within Maynooth.	This amended action supports the maintenance and planting of tree that of native provenance. The amended action will support biodiversity protection and enhancement and promote GHG emission sequestration.
5.8	The text 'utilisation of waste heat' has been included in the action below: Require data centres to include strong energy efficiency measures (including demand management, energy efficiency, utilisation of waste heat or auto generation) to reduce operational carbon footprints through the use of sustainable sources of energy generation in the first instance and then the use of renewable sources of energy to power operations, where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.	This amended action better supports heat recovery projects at data centres and will lead to positive effects on climate by optimizing energy usage. The amendment will not result in any additional, likely, significant environmental effects not already considered in the SEA and AA processes and mitigated against.
3.16	The following KPI has been attached to this action: Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order.	The inclusion of this specific, measurable, and time bound KPI for this Plan Action better supports the delivery of the action, which has the potential to support peatland restoration, resulting in positive effects for climate, biodiversity, and environmental/ecosystem health.
3.17	The following KPI has been attached to this action: Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order	The inclusion of this specific, measurable, and time bound KPI for this Plan Action better supports the delivery of the action, which has the potential to support peatland restoration, resulting in positive effects for climate, biodiversity, and environmental/ecosystem health.
2.23	This action has been updated as follows: Revise working practices within the Council to ensure that 40% of resource hours can achieve remote working as per the National Remote Work Strategy.	The target for this action has been made more ambitious. Making the action more ambitious in nature has the potential to lead to greater local air quality, climate and population and human health related benefits.



Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
3.3	This action has been updated as follows: Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity and water quality levels in keeping with the 'All Ireland Pollinator Plan' and as part of this to develop and implement pesticide reduction policy for lands and areas managed by the Council with a view to eventually eliminating the use of pesticides. - ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.	The ultimate target for this action has been made more ambitious. Ceasing the use pesticides would generate a greater of positive environmental effects on biodiversity, flora, fauna, important habitats, and soil and water quality.
1.4	Promote greater community and business engagement on climate action, circular economy, energy, water conservation, sustainable mobility and biodiversity through events such as Earth Hour and the Community Climate Action Officer, Climate Team and support tools to enable the required behaviour change. The LEO will promote Green Micro, Lean programmes, focused Energy Efficiency Briefing Series and capital programmes demonstrating circular economy principles with a focus on SMEs.	This amendment enhances community engagement action proposed under the plan and may better support climate positive behaviour change.
3.26	This additional action has been added to the Plan: Explore the feasibility of the development of allotments and community gardens in the County to support sustainable food production.	This additional action has the potential to increase the level of sustainable food production and has the potential to lead to a positive effect on the climate environment.
DZ2.15	This additional action has been added to the Plan: Require that all new large scale development within the County provides a life cycle analysis of carbon impact in line with the standard PAS 2080 Carbon Management In Infrastructure as part of the planning application.	This additional action has the potential to support climate positive construction practices, leading to a positive effect on the climate environment.



Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
2.25	<p>This additional action has been added to the Plan:</p> <p>Undertake a feasibility study of the potential for district heating or energy within the County, ensuring such a report as appropriate regard to planning and environmental protection considerations.</p>	<p>This additional action is supportive of renewable energy projects. Such projects may lead to the occurrence of negative environmental effects. The SEA process to date has however considered Plan Action supportive of renewable energy development. Mitigation has been defined to ensure such projects do cause negative environmental effects (e.g., Environmental Governance Principle 3).</p>
5.1	<p>This action has been updated as follows:</p> <p>Prepare and implement an overall Renewable Energy Strategy for the County that is informed by the National Planning Framework to support sustainable development of onshore wind and solar within the County, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.</p>	<p>This action has been amended to ensure the action better aligns with renewable energy targets defined in the National Planning Framework. The amendment will not result in additional, likely significant environmental effect as a result of renewable energy development not already considered and mitigated against under the SEA and AA processes.</p>
2.19	<p>Support the planning and implementation of a programme of improved town bus services (day and nighttime buses) and commence delivery of an enhanced bus stop and bus shelter programme for regional and rural services. Implement the provision of real-time information regarding bus times at new bus shelters.</p>	<p>These amendments give better effect to the action and will better support modal shift and the use of public transport, potentially resulting in a greater magnitude of positive effect on local air quality and climate.</p>
2.22	<p>This action has been updated as follows:</p> <p>Promote and implement the Safe Routes to School Programme to create safer walking and cycling routes within communities, enhance school bus services, alleviate congestion at the school gates and increase the number of students who walk, cycle or take the bus to school by providing safe infrastructure. Ensure supported active travel development is carried out in a manner that has due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, existing traffic and transport conditions and amenity value.</p>	<p>These amendments give better effect to the action and will better support modal shift and the use of public transport, potentially resulting in a greater magnitude of positive effect on local air quality and climate.</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 revisions 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 revisions 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 revisions 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 revisions are broadly intended to provide clarification on existing information and give better effect to the LACAP.</p> <p>The Plan Action revisions 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 revisions 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 revisions will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p>



Potential Significant Effects	
Characteristics of the plan or programme having regard, in particular to:	
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)	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. The Plan Action revisions 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 revisions 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 revision 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>
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; 	



Potential for Significant Effects

Characteristics of the Effects and the Area likely to be affected, having regard in particular to:

<ul style="list-style-type: none"> Exceeded environmental quality standards or limit values; 	<p>They will not give risk to any significant landscape related impacts not previously considered during the SEA process.</p>
<ul style="list-style-type: none"> Intensive land-use 	
<p>The effects on areas or landscapes which have a recognised national, community or international protection status</p>	



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 revision 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 Action revisions 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 a Strategic Environmental Assessment of the Plan Action revision is not required.

The principal reason for this is that the Plan Action revisions are broadly intended to provide clarification on existing information and give better effect to the LACAP. They have the potential to maximise positive effects associated with the plan. They will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.



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APPENDIX 5

AA Screening Report





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APPROPRIATE ASSESSMENT SCREENING REPORT

AA SCREENING REPORT FOR REVISIONS TO THE LOCAL AUTHORITY CLIMATE ACTION PLAN 2024 - 2029

Prepared for:
Kildare County Council



Date: November 2023

Core House, Pouladuff Road, Cork, T12 D773, Ireland

T: +353 21 496 4133 | E: info@ftco.ie

CORK | DUBLIN | CARLOW

www.fehilytimoney.ie

Appropriate Assessment Screening Report for Revisions 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	RD/AMW	AT	AT	27/06/2023

Client: Kildare 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 Revisions to the Local Authority Climate Action 2024 - 2029 to Kildare County Council

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1. INTRODUCTION

1.1 Background

This is the Appropriate Assessment (AA) Screening Report for revisions to the Kildare County Council (KCC) 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 KCC. These submissions were taken into consideration prior to finalisation of the LACAP. KCC have prepared an Observations Report on the submissions received. This document details the submissions received, KCC responses to the submissions, and Plan Action revisions arising following consideration of the submissions.

1.3 Purpose of this Assessment

An AA Screening Assessment must be carried out on all revisions made to the Draft LACAP Actions arising following consideration of submissions. The purpose of this assessment is to identify whether the Plan Action revisions will result in additional effects on European sites not previously considered in the SEA process to date, and to inform whether or not a full AA is required on the Plan Action revisions. This AA Screening Assessment only 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 revisions.

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

1. The Kildare County Council LACAP 2024 - 2029.
2. The Draft NIR for the Kildare County Council LACAP 2024 - 2029.
3. The Draft SEA Environmental Report for the Kildare County Council LACAP 2024 - 2029.
4. Kildare County Council LACAP Submissions Observations Report.
5. The SEA Screening Report for revisions to Kildare 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 KCC 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 SEA Screening Assessment documented in this report.

This assessment commences with a description of the Plan Action revisions being considered. The type of impacts that are likely due to the Plan Action revisions are then identified and evaluated having regard to nature and characteristics of the Plan Action revisions. The overall AA process will be completed in a revised full NIR at the end of the plan development process incorporating all interim steps, revisions and reports/assessments.



An ecological desktop study has been completed for the AA Screening Assessment of the Plan Action revisions, which comprised the following elements:

- Identification of European sites that may be impacted by Plan Action revisions.
- 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 revisions 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 revisions, 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 revision 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. REVISIONS TO THE LOCAL AUTHORITY CLIMATE ACTION PLAN

A summary of Plan Action revisions arising following consideration of consultation submissions is provided in Table 3-1.

Table 3-1 Summary of Plan Action Revisions

Action	Summary of Revision
3.14	The word 'provenance' has been included in the action below: Devise a county native tree management plan which seeks to retain existing native provenance trees, support the planting of native provenance trees and identify sites for large scale native and mixed woodland planting. Set targets to maintain existing and plant new native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Increase range of edible native provenance locally sourced fruits, flowers and vegetables in Council Parks, rooftops and open spaces.
4.15	The word 'provenance' has been included in the action below: Carry out a 'Tree Cover Survey and Policy' on lands managed by the Council, in accordance with an agreed methodology. The study will identify sites for large scale native and mixed woodland planting and set targets for planting and maintaining native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Where possible tree pits should integrate into the surface water drainage to provide water quality benefits.
DZ3.6	The word 'provenance' has been included in the action below: Support carbon sequestration through strategic planting of native provenance species for all new developments, underutilised lands or farms to promote biodiversity gain and ecological connectivity within Maynooth.
5.8	The text 'utilisation of waste heat' has been included in the action below: Require data centres to include strong energy efficiency measures (including demand management, energy efficiency, utilisation of waste heat or auto generation) to reduce operational carbon footprints through the use of sustainable sources of energy generation in the first instance and then the use of renewable sources of energy to power operations, where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.
3.16	The following KPI has been attached to this action: Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order.
3.17	The following KPI has been attached to this action: Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order
2.23	This action has been updated as follows: Revise working practices within the Council to ensure that 40% of resource hours can achieve remote working as per the National Remote Work Strategy.



Action	Summary of Revision
3.3	This action has been updated as follows: Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity and water quality levels in keeping with the 'All Ireland Pollinator Plan' and as part of this to develop and implement pesticide reduction policy for lands and areas managed by the Council with a view to eventually eliminating the use of pesticides. - ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.
1.4	Promote greater community and business engagement on climate action, circular economy, energy, water conservation, sustainable mobility and biodiversity through events such as Earth Hour and the Community Climate Action Officer, Climate Team and support tools to enable the required behaviour change. The LEO will promote Green Micro, Lean programmes, focused Energy Efficiency Briefing Series and capital programmes demonstrating circular economy principles with a focus on SMEs.
3.26	This additional action has been added to the Plan: Explore the feasibility of the development of allotments and community gardens in the County to support sustainable food production.
DZ2.15	This additional action has been added to the Plan: Require that all new large scale development within the County provides a life cycle analysis of carbon impact in line with the standard PAS 2080 Carbon Management In Infrastructure as part of the planning application.
2.25	This additional action has been added to the Plan: Undertake a feasibility study of the potential for district heating or energy within the County, ensuring such a report as appropriate regard to planning and environmental protection considerations.
5.1	This action has been updated as follows: Prepare and implement an overall Renewable Energy Strategy for the County that is informed by the National Planning Framework to support sustainable development of onshore wind and solar within the County, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.
2.19	Support the planning and implementation of a programme of improved town bus services (day and nighttime buses) and commence delivery of an enhanced bus stop and bus shelter programme for regional and rural services. Implement the provision of real-time information regarding bus times at new bus shelters.
2.22	This action has been updated as follows: Promote and implement the Safe Routes to School Programme to create safer walking and cycling routes within communities, enhance school bus services , alleviate congestion at the school gates and increase the number of students who walk, cycle or take the bus to school by providing safe infrastructure. Ensure supported active travel development is carried out in a manner that has due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, existing traffic and transport conditions and amenity value.



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 revisions, 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 revisions 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 revisions.
- The mitigation measures defined in Section 5 of the Draft NIR.

Therefore, the Plan Action revisions must be considered in relation to the current Draft LACAP which has already been subject to SEA and AA considerations. All Plan Action revisions 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 revisions to ascertain the materiality of the revisions and whether the revisions 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 SSCOs 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 Revisions with Potential to Give Rise to Effects

An evaluation of the potential environmental implications of each Plan Action revision has been carried out. This evaluation is presented in Table 4-1.



Table 4-1: Evaluation of Potential Environmental Implications of each Plan Action Revision

Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
3.14	The word 'provenance' has been included in the action below: Devise a county native tree management plan which seeks to retain existing native provenance trees, support the planting of native provenance trees and identify sites for large scale native and mixed woodland planting. Set targets to maintain existing and plant new native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Increase range of edible native provenance locally sourced fruits, flowers and vegetables in Council Parks, rooftops and open spaces.	This amended action provides clarification surrounding the types of trees previously considered. Therefore there are no additional sources for effects which were not already considered by the existing NIR. No further considerations are required in that regard.
4.15	The word 'provenance' has been included in the action below: Carry out a 'Tree Cover Survey and Policy' on lands managed by the Council, in accordance with an agreed methodology. The study will identify sites for large scale native and mixed woodland planting and set targets for planting and maintaining native provenance trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation. Where possible tree pits should integrate into the surface water drainage to provide water quality benefits.	This amended action provides clarification surrounding the types of trees previously considered. Therefore there are no additional sources for effects which were not already considered by the existing NIR. No further considerations are required in that regard.
DZ3.6	The word 'provenance' has been included in the action below: Support carbon sequestration through strategic planting of native provenance species for all new developments, underutilised lands or farms to promote biodiversity gain and ecological connectivity within Maynooth.	This amended action provides clarification surrounding the types of trees previously considered. Therefore there are no additional sources for effects which were not already considered by the existing NIR. No further considerations are required in that regard.



Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
5.8	<p>The text 'utilisation of waste heat' has been included in the action below:</p> <p>Require data centres to include strong energy efficiency measures (including demand management, energy efficiency, utilisation of waste heat or auto generation) to reduce operational carbon footprints through the use of sustainable sources of energy generation in the first instance and then the use of renewable sources of energy to power operations, where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.</p>	<p>This amended action provides clarification to the text previously considered. Therefore there are no additional sources for effects which were not already considered by the existing NIR. No further considerations are required in that regard.</p>
3.16	<p>The following KPI has been attached to this action:</p> <p>Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order.</p>	<p>The inclusion of this specific, measurable, and time bound KPI for this Plan Action better supports the delivery of the action, which has the potential to support peatland restoration, resulting in positive effects for climate, biodiversity, and environmental/ecosystem health.</p> <p>This only relates to the tracking measures of existing actions. Therefore there are no additional sources for effects which were not already considered by the existing NIR. No further considerations are required in that regard.</p>
3.17	<p>The following KPI has been attached to this action:</p> <p>Delivery of Agreement with stakeholders to designate 70% of bog land for nature and biodiversity by means of a Nature Reserve or Park or Special Amenity Area order</p>	<p>The inclusion of this specific, measurable, and time bound KPI for this Plan Action better supports the delivery of the action, which has the potential to support peatland restoration, resulting in positive effects for climate, biodiversity, and environmental/ecosystem health.</p> <p>This only relates to the tracking measures of existing actions. Therefore there are no additional sources for effects which were not already considered by the existing NIR. No further considerations are required in that regard.</p>



Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
2.23	This action has been updated as follows: Revise working practices within the Council to ensure that 40% of resource hours can achieve remote working as per the National Remote Work Strategy.	The target for this action has been made more ambitious. Making the action more ambitious in nature has the potential to lead to greater local air quality, climate and population and human health related benefits. Therefore there are no additional sources for effects which were not already considered by the existing NIR. No further considerations are required in that regard.
3.3	This action has been updated as follows: Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity and water quality levels in keeping with the 'All Ireland Pollinator Plan' and as part of this to develop and implement pesticide reduction policy for lands and areas managed by the Council with a view to eventually eliminating the use of pesticides. - ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.	The ultimate target for this action has been made more clear in the higher limit of the goal. This has inherent benefits to the receiving environment; however, it is in keeping with the environmental effects identified in the existing NIR. There are no additional sources for effects; therefore, no further considerations are required in that regard.
1.4	Promote greater community and business engagement on climate action, circular economy, energy, water conservation, sustainable mobility and biodiversity through events such as Earth Hour and the Community Climate Action Officer, Climate Team and support tools to enable the required behaviour change. The LEO will promote Green Micro, Lean programmes, focused Energy Efficiency Briefing Series and capital programmes demonstrating circular economy principles with a focus on SMEs.	This amendment enhances community engagement action proposed under the plan and may better support climate positive behaviour change. This has inherent benefits to the receiving environment; however, it is in keeping with the environmental effects identified in the existing NIR. There are no additional sources for effects; therefore, no further considerations are required in that regard.
3.26	This additional action has been added to the Plan: Explore the feasibility of the development of allotments and community gardens in the County to support sustainable food production.	This additional action has the potential to increase the level of sustainable food production and has the potential to lead to a positive effect on the climate environment.



Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
		The feasibility assessment will be undertaken with respect to the environmental governance principals within the LACAP which were considered within the existing NIR. This has inherent benefits to the receiving environment; however, it is in keeping with the environmental effects identified in the existing NIR. There are no additional sources for effects; therefore, no further considerations are required in that regard.
DZ2.15	This additional action has been added to the Plan: Require that all new large scale development within the County provides a life cycle analysis of carbon impact in line with the standard PAS 2080 Carbon Management In Infrastructure as part of the planning application.	This additional action has the potential to support climate positive construction practices, leading to a positive effect on the climate environment. This has inherent benefits to the receiving environment; however, it is in keeping with the environmental effects identified in the existing NIR. There are no additional sources for effects; therefore, no further considerations are required in that regard.
2.25	This additional action has been added to the Plan: Undertake a feasibility study of the potential for district heating or energy within the County, ensuring such a report as appropriate regard to planning and environmental protection considerations.	This additional action is supportive of renewable energy projects. Such projects may lead to the occurrence of negative environmental effects. However, the feasibility assessment will be undertaken with respect to the environmental governance principals within the LACAP which were considered within the existing NIR. This has inherent benefits to the receiving environment; however, it is in keeping with the environmental effects identified in the existing NIR. There are no additional sources for effects; therefore, no further considerations are required in that regard.
5.1	This action has been updated as follows: Prepare and implement an overall Renewable Energy Strategy for the County that is informed by the National Planning Framework to support sustainable development of onshore wind and solar within the County, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.	This action has been amended to ensure the action better aligns with renewable energy targets defined in the National Planning Framework. The amendment will not result in additional, likely significant environmental effect as a result of renewable energy development not already considered and mitigated against under the SEA and AA processes. There are no additional sources for effects; therefore, no further considerations are required in that regard.



Action	Summary of Revision	Evaluation of Potential Environmental Implications of each Plan Action Revision
2.19	Support the planning and implementation of a programme of improved town bus services (day and nighttime buses) and commence delivery of an enhanced bus stop and bus shelter programme for regional and rural services. Implement the provision of real-time information regarding bus times at new bus shelters.	These amendments give better effect to the action and will better support modal shift and the use of public transport, potentially resulting in a greater magnitude of positive effect on local air quality and climate. There are no additional sources for effects that were not previously considered by the existing NIR; therefore, no further considerations are required in that regard.
2.22	This action has been updated as follows: Promote and implement the Safe Routes to School Programme to create safer walking and cycling routes within communities, enhance school bus services , alleviate congestion at the school gates and increase the number of students who walk, cycle or take the bus to school by providing safe infrastructure. Ensure supported active travel development is carried out in a manner that has due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, existing traffic and transport conditions and amenity value.	These amendments give better effect to the action and will better support modal shift and the use of public transport, potentially resulting in a greater magnitude of positive effect on local air quality and climate. There are no additional sources for effects that were not previously considered by the existing NIR; therefore, no further considerations are required in that regard.



4.4 Summary of the Evaluation

The Plan Action revisions 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 revisions 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 revisions 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.

4.5 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 revisions to SEA Screening was carried out to determine the need for a full AA for the Plan Action revisions to the Draft LACAP in this case. It has been demonstrated that implementation of the Plan Action revisions are not foreseen to have any significant effects on any European Site.

The principal reason for this is that the Plan Action revisions 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 effects, including effects on ecological processes or European sites, not already considered by the existing NIR for the Draft LACAP.

It is concluded that the Plan Action revisions will not give rise to any adverse 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 Action revisions



6. REFERENCES

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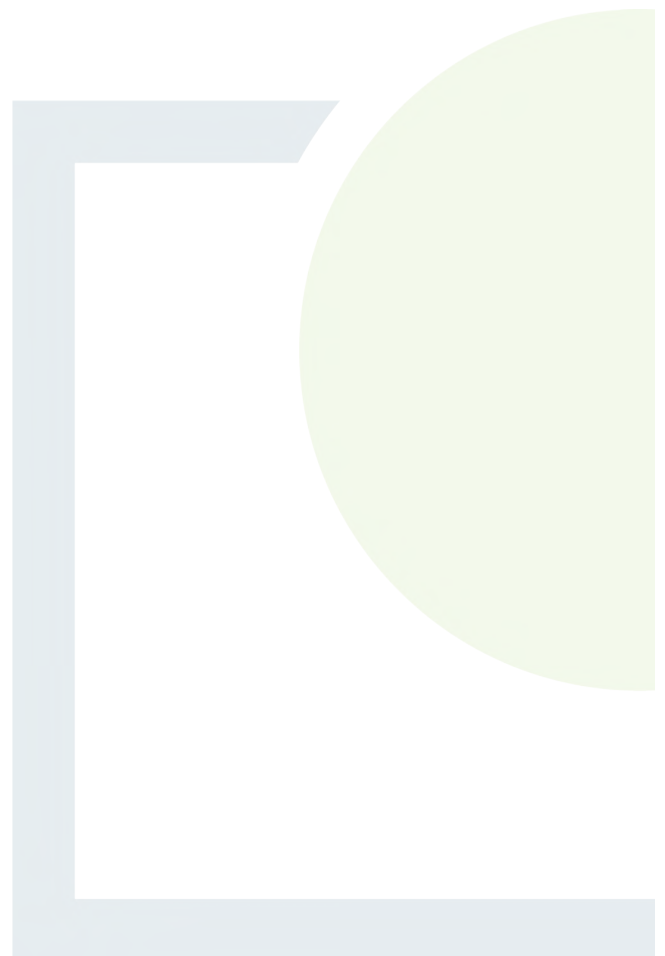
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APPENDIX 1

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's 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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