



Cavan County Council
Local Authority
Climate Action Plan
2024-2029

Strategic Environmental Assessment Documentation



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE &
PLANNING

LOCAL AUTHORITY CLIMATE ACTION PLAN

SEA Environmental Report

Prepared for:
Cavan County Council



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an Chabháin
Cavan
County Council

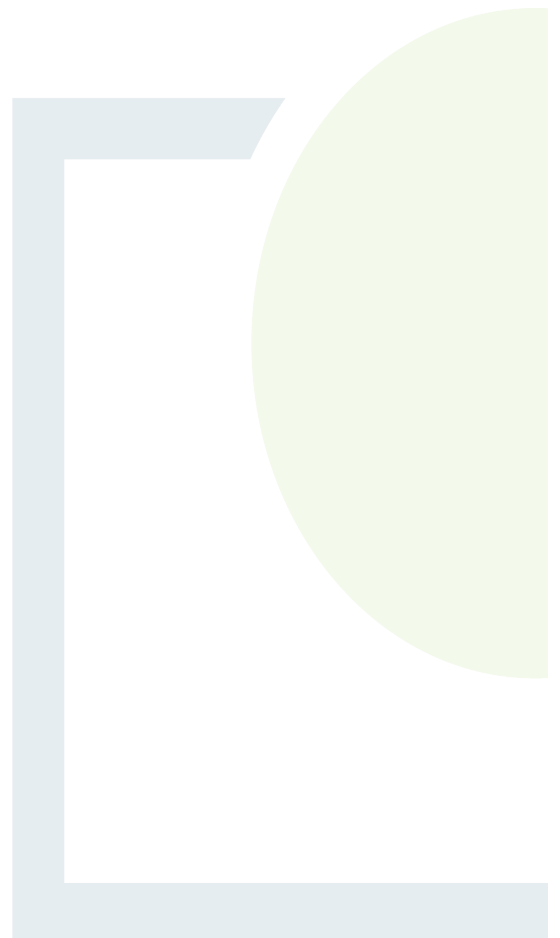
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SEA Environmental Report for the Local Authority Climate Action Plan 2024-2029 for Cavan County Council

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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 Cavan County Council (CCC) Local Authority Climate Action Plan (herein referred to as the 'Plan' or 'LACAP') 2024-2029 for the Cavan functional area. The purpose of this SEA was to identify and evaluate the likely significant environmental effects of implementation of the LACAP.

Background

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

Approach to SEA

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

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

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

The LACAP

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

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



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

The LACAP has been developed in accordance with the requirements of Section 16 of the Climate Act. It is consistent with the Climate Action Plan 2023 (CAP23) and the National Adaptation Framework. Local authority Development Plans are also 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 receiving environment within both the Republic of Ireland and Northern Ireland has been considered during 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



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	<p>In the 2022 Census, the total population of County Cavan was 81,704 persons, showing the trend of an increase in total population in the County by ca. 7.3% (5,528 persons) since the previous Census.</p> <p>County Cavan is encompassed by the Northern & Western Regional Assembly Regional Spatial and Economic Strategy (RSES) 2020-2032.</p>
Biodiversity, Flora & Fauna	<ul style="list-style-type: none"> • The Marble Arch Caves UNESCO Global Geopark is partially located within County Cavan and County Fermanagh in Northern Ireland. • There are 7 designated SACs within, partially within or adjacent to the County boundary, including: Lough Oughter And Associated Loughs SAC (000007), Killyconny Bog (Cloghbally) SAC (000006), River Boyne And River Blackwater SAC (002299), Cuilcagh - Anierin Uplands SAC (000584), Corratirrim SAC (000979), Boleybrack Mountain SAC (002032) and Moneybeg and Clareisland Bogs SAC (002340). • There are 3 designated SPAs within, partially within or adjacent to the County boundary, including: Lough Oughter SPA (004049), Lough Kinale and Derragh Lough SPA (004061), Lough Sheelin SPA (004065). • There is one designated Ramsar site within the County boundary; Lough Oughter. • There are 2 designated NHAs within or partially within the County; Slieve Rushen Bog NHA (000009) and Lough Kinale And Derragh Lough NHA (000985). • There are 21 pNHAs within, partially within, or adjacent to the County boundary, including: Annagh Lough (Ballyconnell) (000974), Black And Derrygoony Loughs (001596), Blackrock's Cross (000976), Bruse Hill (000002), Clonty Lough (000977), Cootehill Church (000003), Cordonaghy Bog (000978), Corratirrim (000979), Cuilcagh – Anierin Uplands (000584), Dromore Lakes (000001), Drumcor Lough (001841), Drumkeen House Woodland (000980), Glasshouse Lake (000983), Kilconny Bog (Cloghbally) (000006), Lough Garrow and Lough Gubdoo (000984), Lough Gowna (000992), Lough Macnean Upper (000986), Lough Oughter and Associated Loughs (000007), Lough Ramor (000008), Lough Sheelin (000987), and Madabawn Marsh (000988). • There is one location within the County protected by The Flora (Protection) Order, 2022 (S.I. No 235 of 2022): Cuilcagh (<i>Hamatocaulis vernicosus</i>). • There are three Wildfowl Sanctuaries within or partially within the County: Lough Oughter Group (WFS-01); Lough Ramor (WFS-03); and Dartrey/Fairfield (WFS-04).



Environmental Component	Summary of the Baseline Environmental Characteristics
	<ul style="list-style-type: none"> The most dominant land cover type is agricultural pastures throughout the whole County. Coniferous forests and semi-natural areas exist in relatively small areas scattered across the County. Heterogeneous agricultural areas and wetlands are concentrated in the northwest. Urban fabric/Artificial surfaces are located in towns scattered across the County, especially in Cavan town.
Landscape & Visual Amenity	<ul style="list-style-type: none"> County Cavan has a diverse landscape, characterised by highlands in the east of the County, Cuilcagh-Anierin uplands in the north-west of the County and drumlins and lakelands throughout. Landscape Categorisation for the County Cavan by the County Council identifies 5 main Landscape Character Areas. In addition to this, 17 Scenic Viewing Points and 3 Scenic Routes have been identified.
Cultural Heritage - Archaeology & Architectural	<ul style="list-style-type: none"> There are hundreds of Recorded Monuments within the County. These include round towers, high crosses, burial sites, ringforts, tower houses, fulacht fia, raths, court tombs, portal tombs, wedge tombs, cairns, earthworks, abbeys, and souterrains. There are 7 recorded National monuments on the RMP which are in State Care. There are approximately 900 entries to the Record of Protected Structures within the County. There are currently 16 designated ACAs within the County; Farnham Street ACA (Cavan Town), Bridge Street ACA (Cavan Town), Lurgan Quarter (Virginia) ACA, Lower Market Street, Cootehill ACA, Kingscourt ACA, Mullagh ACA, Redhills ACA, The Diamond (Belturbet) ACA, Bawnboy ACA, The Lawn (Belturbet) ACA, Dowra ACA, Blacklion ACA, Kilnaleck ACA, Mount Nugent ACA, Bailieborough ACA and Butlersbridge ACA.
Soils	<ul style="list-style-type: none"> Dominant soil types in the county include: Gleys, Brown Earths/Acid Brown Earths and Peaty Gleys. Other soil types in the county include Brown Podzolics and Alluvial soils. Peat bogs are found covering small areas scattered across the County but is mostly concentrated in the west as upland bog, which is of international importance; Cuilcagh - Anierin Uplands SAC.
Land Use	<ul style="list-style-type: none"> Land use mapping for Cavan 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.



Environmental Component	Summary of the Baseline Environmental Characteristics
	<ul style="list-style-type: none"> • 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. • Under the Clean Air for Europe Directive [Directive 2008/50/EC], all areas in County Cavan are defined as 'Zone D'. The current air quality in the County is generally identified by the EPA as being of Good status.
Water	<ul style="list-style-type: none"> • Most of the County is situated within the Erne catchment (an area drained by the River Erne and all streams entering tidal water between Aughrus Point and Kildoney Point). The County is also partially drained by the catchments: Upper Shannon; Newry/Fane/Glyde/Dee; and Boyne. • The WFD groundwater status (2016-2021) underlying County Cavan is generally identified as being of Good status. • The WFD status of rivers waterbodies (2016-2021) draining County Cavan ranges from high to poor. Numerous lake waterbodies are scattered across the County. The WFD Status 2016-2021 for the lakes mostly range from moderate to poor. • Certain areas across the County are at risk of flooding from various sources including fluvial and estuarial. There are various historic and predictive indicators of flood risk in the County, including from Loughs Oughter, Sheelin, Ramor, Brackley, Lakefield, Bellaboy and along Rivers Cavan, Erne, Annalee, May Hill and Dromore.
Material Assets	<ul style="list-style-type: none"> • Three urban areas in the County are listed as priority areas in the latest EPA 2022 report 'Urban Waste Water Treatment in 2021'; Bailieborough, Blacklion and Mullagh. • County Cavan is traversed by five national primary routes; the N3, the N16, the N54, the N55 and the N87. The County is also served by Bus Éireann and a number of private bus operators. County Cavan shares the international land border with Northern Ireland and is seen as a 'Gateway' to the Northern and Eastern Regions, providing fundamental connections with other urban centres in these regions. • The existing Green Infrastructure in the County boasts many key features and activities across the urban, rural and upland areas, including NHAs, SACs, SPAs, Areas of High Amenity, woodlands and boglands connected by walking routes, eskers and riparian ways.



Environmental Component	Summary of the Baseline Environmental Characteristics
Tourism & Recreation	<ul style="list-style-type: none"> Tourism and recreation are influenced by a range of factors in Ireland. Fáilte Ireland has recently published their four brand strategies which will define the spatial scope and spread of future tourism developments within Ireland. County Cavan hosts 'Ireland's Hidden Heartlands' and the success of the brand strategy will result in infrastructure demands to previously less trafficked areas.
Climate Change	<ul style="list-style-type: none"> Cavan is affected by climate change policy and issues broadly. The recent Climate Action and Low Carbon Development (Amendment) Act 2021 was established to provide for the approval of plans by the Government in relation to climate change. This aims at pursuing the transition to a climate resilient, biodiversity rich and climate neutral economy by no later than the end of the year 2050. Ireland's Climate Action Plan 2023 sets out Ireland's national and sectoral targets in this regard. Future changes in climate and associated impacts on sea level, rainfall patterns/intensity and river flow will influence flooding frequency and extent in the future. Local Authorities in compliance with the Regional Planning Guidelines are attempting to adopt sustainable flood risk strategies in areas likely to be at risk of flooding in the future in the context of climate change and changing weather patterns. Changes to climate could lead to an increase in flooding events in Ireland.

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

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

Population and Human Health – Key Issues relating to the LACAP

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

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

- Route selection and classification criteria are a key consideration in the development of blueways (i.e. active travel schemes that may align with rivers or streams) and greenways within the LACAP due to the largely linear nature of these developments.



- The potential for effects on non-designated biodiversity features e.g. important habitats and species outside designated sites - particularly with regard to fragmentation, barriers to movement and displacement.
- The potential for effects on protected areas: National and European sites (e.g. SAC, SPAs, RAMSAR), National sites (e.g. NHAs) and other Natural Heritage Sites and Conservation Interest Sites e.g. refuge for fauna or flora, wildfowl reserves.
- The potential to spread invasive species.
- The potential for biodiversity enhancement.

Landscape & 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, 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.
- Supported renewable energy development 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 CCC's LACAP. They are high-level in nature and set strategic goals for improvement.

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

Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species. ¹
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.

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
	B4	To avoid or minimize significant impacts on semi-natural habitats, species, environmental features, or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation; and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.
Landscape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.
	AQN3	Avoid or minimise adverse noise impacts.
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.
	W5	Prevent impact upon drinking water quality.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.
	MAI3	Promote sustainable transportation.
	MAI4	Promote sustainable waste management.
	MAI5	Promote sustainable water use and drainage management.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.



Environmental Component	SEO Code	Strategic Environmental Objective
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change

Description and Evaluation of LACAP Alternatives

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

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

The following reasonable alternatives to the LACAP were identified:

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

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

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



- Alternative 2 - The Holistic Approach - and Alternative 3 - The Holistic and Participatory Approach - will both broadly deliver suitably wide ranging and effective climate action. These alternatives have the potential to generate multiple positive environmental effects, including a reduction in GHG emissions at organisational, community and sectoral levels, in addition to a variety of other environmental benefits. These alternatives will place a balanced emphasis on both climate mitigation and adaptation action, ensuring climate change related environmental risks are adequately understood and managed at community level.
- Alternative 3 has the best potential to deliver effective climate action given its holistic, wide encompassing nature; and given its strong community engagement emphasis, which supports better participation in climate action at community level. Alternative 3 has better potential there to fully realise potential environmental effects than Alternative 2.

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

Evaluation of the Environmental Effects of LACAP Implementation

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

- The variety of climate actions defined in the LACAP, including organisational and community based actions are likely to positive effect the climate environment.
- The LACAP is broadly supportive of different forms of community and local area based renewable energy development, which will have a positive effect on the climate environment.
- In the absence of appropriate mitigation, community and local area renewable energy development that might be supported by LACAP actions, including any associated ancillary and linear infrastructure, has the potential to have a variety of unintended negative environmental effects, including effects on local human receptors, biodiversity, landscape character and visual amenity, and the receiving noise environment.
- The LACAP supports the increased use of light-emitting diode (LED) lighting potentially across a wide geographic area. In absence of appropriate mitigation, the wide use of such lighting may lead to adverse effects on sensitive nocturnal species.
- Several LACAP actions are supportive of the upgrading/retrofitting of buildings to improve energy performance. In the absence of appropriate mitigation, such actions may negatively affect the status of protected structures.
- The LACAP supports the carrying out of a range of flood 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 LACAP has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on water and biodiversity environments.
- LACAP actions support better resource management and the circular economy at organisational, community and local area level, which can potentially lead to improvement resource efficiency and reduced lifecycle GHG emissions associated with material production.



- The inappropriate or improper implementation of waste management related action could have unintended, negative environmental and nuisance related effects.
- The LACAP supports the development of community and local area level nature based solutions - in response to climate related risk - which are supportive of biodiversity protection and enhancement.
- The LACAP supports green infrastructure development broadly. In absence of appropriate design and mitigation, the development of green infrastructure that is of a significant scale or extent could potentially result in negative environmental effects, including negative construction related effects, negative effects on biodiversity or negative effects on cultural heritage assets.
- The LACAP defines a variety of climate adaptation related actions designed to protect human receptors, biodiversity and heritage assets from the impacts of climate change influenced events such as flooding. The implementation of this action has the potential to generated positive effects for these environmental receptors - by reducing the risk of such events impinging on or damaging these receptors.
- LACAP actions support the development, expansion and management of safe active travel networks. The delivery of an expanded safe active travel network has the potential to promote the use of sustainable and active travel modes in the community, encourage modal shift, reduce traffic related risks and support the reduction of vehicle related emissions.
- LACAP actions support the development, expansion and management of safe active travel networks. In the absence of appropriate design and mitigation, the development of active travel networks can negatively impact on the receiving human, noise, air, water, soils, biodiversity, cultural heritage or existing traffic and transport environments.
- 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.
- LACAP actions support the expansion of EV charging network and active travel parking across the breadth of the local authority functional area. In the absence of appropriate mitigation, the construction of additional charging point infrastructure can negatively impact on the receiving human, noise, air, water, soils, biodiversity, cultural heritage, material assets or existing traffic and transport environments.

Transboundary Environmental Effects

Transboundary environmental effects, including marine based transboundary effects, were a fundamental consideration during the carrying out of the environmental assessment and form an intrinsic part of the detailed environmental assessment undertaken under this SEA. In the absence of any mitigation, the identified effects, as presented in the preceding section have the potential to also impact Northern Irish receptors within the zone of influence of the local authority functional area.

Mitigation Measures

Overview of Mitigation Measures

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



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

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

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

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

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

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

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

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

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



Conclusions

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

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

All potential effects that may cause transboundary impacts will also be appropriately mitigated with the adoption of the defined mitigation. Mitigation measures have been adopted to ensure that the environmental effects of Plan Action are controlled at the source. Thus, it can be concluded that the LACAP will not have any likely, significant transboundary impacts.

Monitoring Measures

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

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

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

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

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



1. INTRODUCTION

1.1 Background

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

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

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

1.2 SEA Environmental Report

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

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

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

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



1.3 Background to SEA and Legislative Context

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

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

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

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

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

1.4 Purpose of this SEA

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

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

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

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



1.5 Appropriate Assessment

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

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

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

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

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



2. THE LACAP

2.1 Overview

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

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

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

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

2.2 Context

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

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

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

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

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



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

2.3 LACAP Content

The LACAP focusses on several theme areas which are considered to be key for achieving a climate resilient and climate neutral future at organisational and community level. A number of main objectives have been developed for each 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 LACAP is presented in Table 2-1.

Table 2-1: LACAP Theme Area and Main Objectives

Theme Area	Main Objective
Governance and Leadership	To provide robust leadership, governance, and commitment to climate action to achieve our Vision, Mission and Strategic Goals in line with National Policy.
Built Environment and Transport	To support and empower communities to activate on climate action with enhanced sustainability and resilience.
Natural Environment and Green Infrastructure	To enhance the natural environment of County Cavan to work in support of nature based solutions for climate resilience and emissions reduction whilst promoting enriched biodiversity.
Communities: Resilience and Just Transition	To support and empower communities to activate on climate action with enhanced sustainability and resilience.
Sustainability and Resource Management	To influence and create a sustainable and resource conscious culture within County Cavan.

2.4 Overall Vision and Strategic Outcomes

The overall vision of the LACAP is as follows:

- 'A climate resilient county with an ambition to be climate neutral by 2050.'

The following mission has been defined for the LACAP.

- 'To deliver measurable climate actions across our county and within the Council through leadership, example and mobilising action at local level.'



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

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

2.5 Relationship of the LACAP with other Relevant Plans and Programmes

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



3. SEA METHODOLOGY

3.1 The SEA Process

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

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

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

This SEA Environmental Report documents the outcomes of Stage 3.

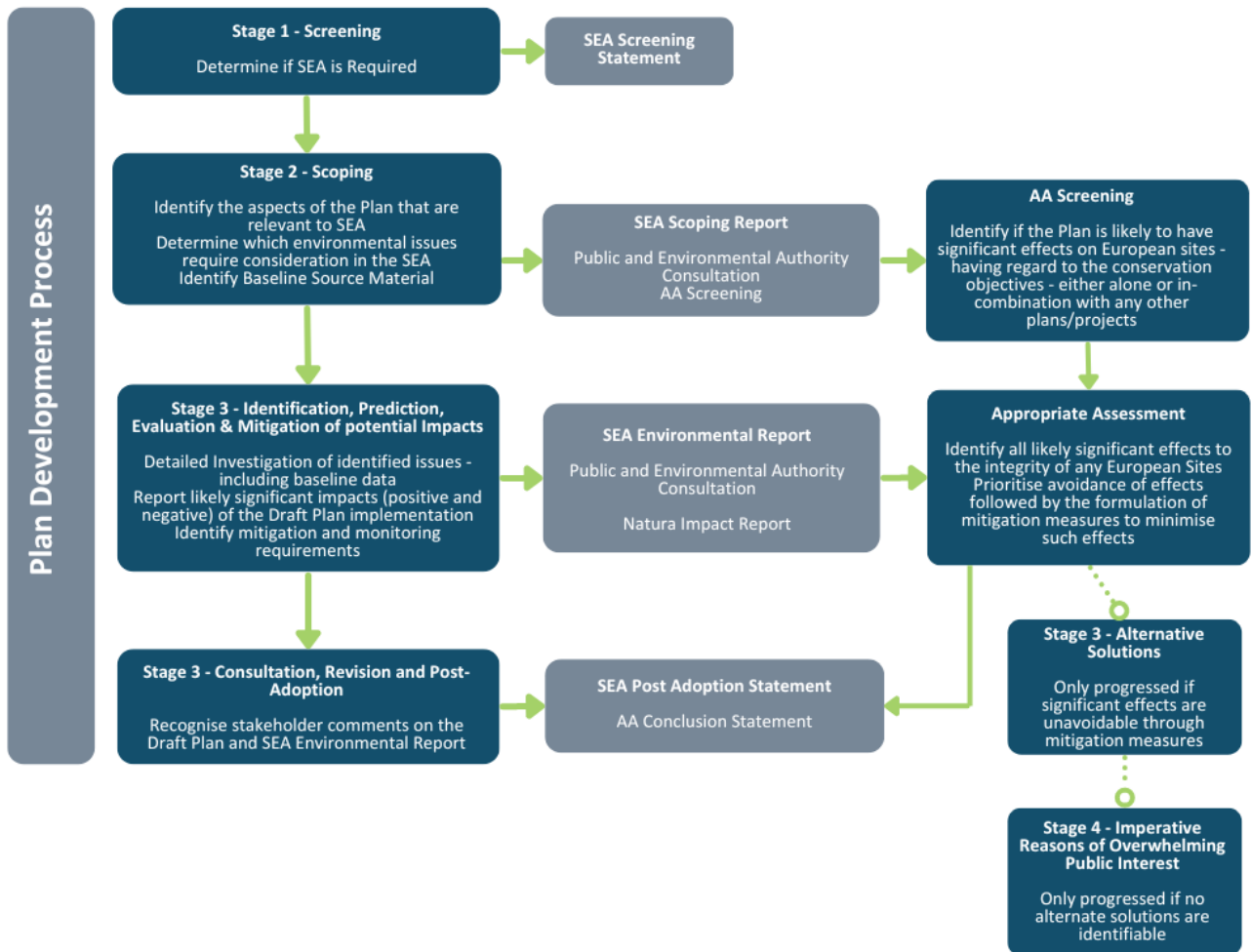


Figure 3-1: SEA and AA Stages and Key Deliverables

3.2 Overview of the LACAP SEA and AA Processes

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

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

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

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

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



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

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

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

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

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

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

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

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

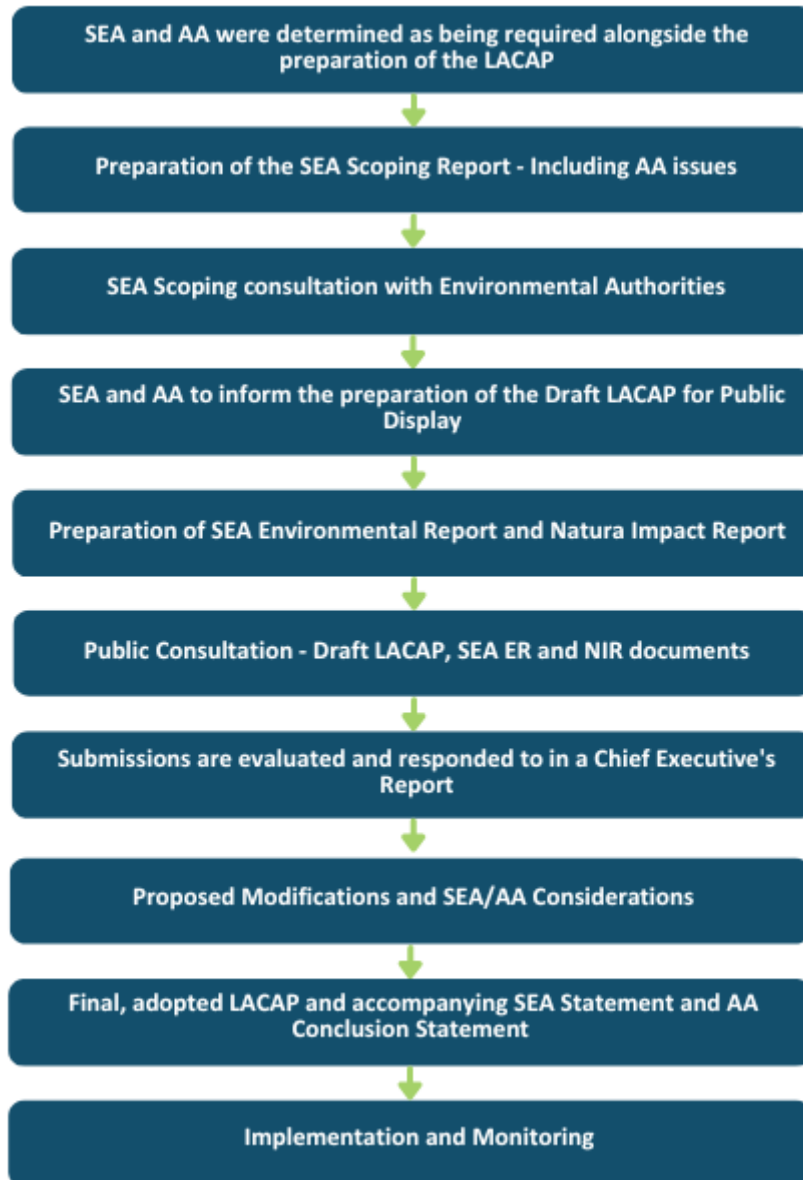


Figure 3-2: Overview of the SEA Process in the Review and Preparation of the Local Authority Climate Action Plan (including AA processes)



3.3 SEA Processes Undertaken To Date

3.3.1 SEA Screening

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

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

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

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

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

3.3.2 SEA Scoping

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

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

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



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

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

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape & 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)

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 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 LACAP and the incorporation of appropriate environmental mitigation measures into the LACAP. It should serve to guide the plan-making process and ensure optimal environmental outcomes.

¹¹ Eastern and Midland Region.



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

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

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

3.4.2 [SEA Environmental Report Authors](#)

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



FT was retained by CCC 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
<p>Bernie Guinan</p> <p>MSc, BSc. (Envi. Sci & Tech),</p> <p>Dip. Pollution Assessment Control</p> <p>Dip. Business Development</p>	<p>Project Director</p>	<p>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.</p>
<p>Andrew Torsney</p> <p>PhD, Ecotourism and visitor Behavior 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>	<p>Project Manager</p>	<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 Honors Degree, Environmental Management, Dublin Institute of Technology, 2012</p> <p>Chartered Environmentalist, The Society for the Environment</p>	<p>SEA Team Lead</p>	<p>Richard is Senior Environmental Scientist at Fehily Timoney. Richard holds a B.Sc. First-Class Honors 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 Honors, Environmental Science and Sustainable Technology, Munster Technological University, 2022</p>	<p>Project Support</p>	<p>Eunice is an Environmental Scientist on the Waste and Environmental Team at Fehily Timoney and Company. Eunice holds a First-Class Honors BSc in Environmental Science and Sustainable Technology from Munster Technological University.</p>



Name and Qualifications	Project Role	Relevant Experience
		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.
Bruna Felipe BE (Hons) Environmental Engineering UNESP, Sao Paulo State University, Brazil	Project Support	Bruna is a Project Environmental Engineer of Fehily Timoney and Company. Bruna holds a BE of Environmental Engineering from UNESP, Sao Paulo State University, Brazil. Bruna has been involved in a range of contaminated land projects and Tier II Environmental Risk Assessments (ERA). Bruna has been responsible for the data collation, validation and analysis for the preparation of ERA reports for a range of landfill related projects, including works related to meeting environmental monitoring and license compliance for a variety of landfills. She has been involved in the preparation of Appropriate Assessment reports and a European Sites library for the Department of Agriculture, Food and Marine. She also has experience developing baseline emission inventories and conducting baseline environmental assessments for multiple projects.
Eibhlin 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 Honors. 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 Meng Sc 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.

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.



Table 3-2: SEA Environmental Report Checklist

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

3.5 SEA Statement

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

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



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

3.6 Integrated Biodiversity Impact Assessment

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

The methodology employed facilitates 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 receiving environment within both the Republic of Ireland and Northern Ireland has been considered during this evaluation.

The following Environmental Components were considered during this evaluation:

- Population and Human Health
- Biodiversity, Flora & Fauna¹³
- Landscape & Visual Amenities¹⁴
- Cultural Heritage - Archaeology & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water¹⁵
- 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.

¹³ The defined 'Biodiversity' environment is considered to be inclusive of the terrestrial, aquatic and marine biodiversity environments within the Republic of Ireland and Northern Ireland.

¹⁴ The defined 'Landscape' environment is considered to include inland water scape and marine scape within the Republic of Ireland and Northern Ireland (Note the European Landscape Convention's (ELC) definition of 'Landscape' as being 'natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas').

¹⁵ The defined 'Water' environment is considered to be inclusive of surface waters, groundwater, transitional waters, coastal waters and the marine environment generally – both within the Republic of Ireland and Northern Ireland.



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 will be used throughout the SEA process is the EPA's SEA Spatial Information Sources Inventory¹⁶. 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.

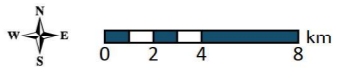
This section of the SEA Environmental Report examines the likely evolution of the baseline environmental in the absence of the LACAP being implemented (i.e., in the 'do nothing' or 'do minimum' scenario).

¹⁶ Environmental Protection Agency. 2022. SEA Spatial Information Sources: Available at [Strategic Environmental Assessment | Environmental Protection Agency \(epa.ie\)](https://www.epa.ie/assessment/sea)



Legend
 Local Authority Boundaries

CAVAN COUNTY COUNCIL

Local Authority Boundary	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.1
CLIENT:	CAVAN COUNTY COUNCIL
DATE: 15/08/2023	SCALE: 1:312,500 @ A3
	



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 Path: R:\Map Production\2023\23-076\Workspaces\SEA\SEA_ER_Fig_4_1_Local_Authority_Boundary.aprx



4.2 Population and Human Health

4.2.1 Characterisation of the Environmental Baseline

In the 2022 Census, the total population of County Cavan was 81,704 persons, showing the trend of an increase in total population in the County by ca. 7.3% (5,528 persons)¹⁷ since the previous Census.

County Cavan is encompassed by the Northern & Western Regional Assembly Regional Spatial and Economic Strategy (RSES) 2020-2032.

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 Decarbonisation Zone.
- Potential effects on water quality.

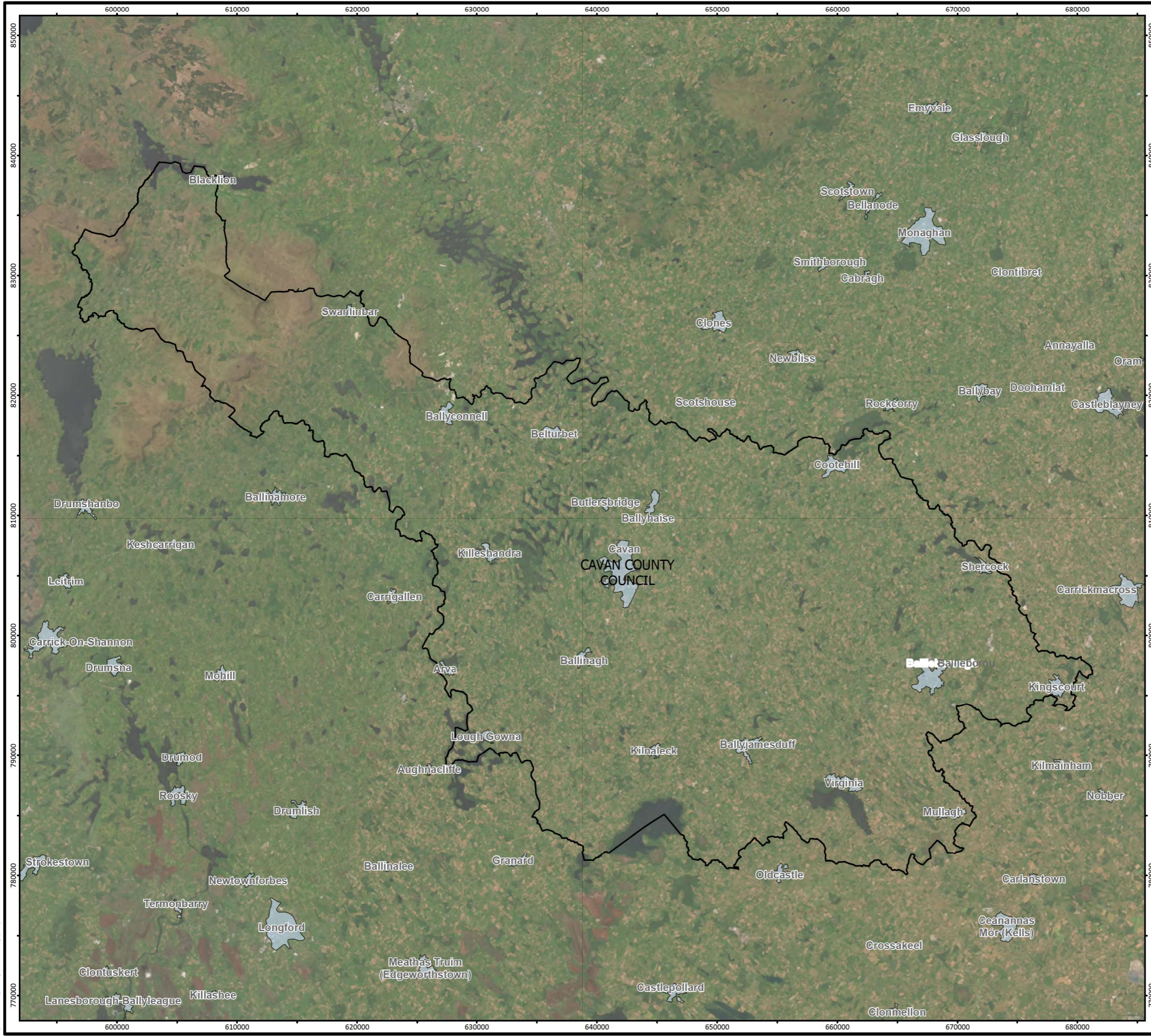
With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that 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 Health 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 Decarbonisation Zone.
- Potential visual effect of green infrastructure development.

¹⁷ Central Statistics Office. 2022. FY003B - Population and Actual and Percentage Change 2006 to 2022 (cso.ie) <https://data.cso.ie/table/FY003B>



- Legend**
- Local Authority Boundaries
 - Census Settlements

Major Settlement Pattern	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.2
CLIENT:	CAVAN COUNTY COUNCIL
DATE: 30/08/2023	SCALE: 1:312,500 @ A3



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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 Cavan including:

Table 4-1: Designated Ecological Sites and Protected Species

Environmental Features	Description
UNESCO ¹⁸ (United Nations Educational, Scientific and Cultural Organisation) World Heritage and Biosphere sites	The Marble Arch Caves UNESCO Global Geopark is partially located within County Cavan and County Fermanagh in Northern Ireland. The Marble Arch Caves UNESCO Global Geopark consists of a system of caves, cliffs, rocky outcrops, upland blanket bogs, rolling drumlins and flooded hollows, which are joined together by the lake systems of Erne, MacNea and Oughter.
Special Areas of Conservation ¹⁹ (SACs) ²⁰	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 boundary, including: Lough Oughter And Associated Loughs SAC (000007), Killyconny Bog (Cloghbally) SAC (000006), River Boyne And River Blackwater SAC (002299), Cuilcagh - Anierin Uplands SAC (000584), Corratirrim SAC (000979), Boleybrack Mountain SAC (002032) and Moneybeg and Clareisland Bogs SAC (002340). These and other sites beyond the County border that could be affected by the LACAP have been considered by the assessments.
Special Protection Areas ²¹ (SPAs) ²²	Designated under the Birds Directive (EC Directive 200/147/EC on the conservation of wild birds). There are 3 designated SPAs within, partially within or adjacent to the County boundary, including: Lough Oughter SPA (004049), Lough Kinale and Derragh Lough SPA (004061), Lough Sheelin SPA (004065). These and other sites beyond the County border that could be affected by the LACAP have been considered by the assessments.
RAMSAR sites ²³	The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory.

¹⁸ [UNESCO Sites in Ireland - HeritageMaps.ie - data.gov.ie](https://www.heragemaps.ie/data.gov.ie)

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

²⁰ [Habitats Directive \(1992/43/EEC\) - habitats and species listed in Annex I and II](https://www.npws.ie/habitats-directive-1992-43-eeec)

²¹ [Designated site data | National Parks & Wildlife Service \(npws.ie\)](https://www.npws.ie/designated-site-data)

²² [Birds Directive \(2009/147/EEC\)](https://www.npws.ie/birds-directive-2009-147-eeec)

²³ [Ramsar Sites - Datasets - data.gov.ie](https://www.data.gov.ie/datasets)



Environmental Features	Description
	Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares. There is one designated Ramsar site within the County boundary; Lough Oughter.
Natural Heritage Areas ²⁴ (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 the Wildlife (Amendment) Act 2000. There are 2 designated NHAs within or partially within the County; Slieve Rushen Bog NHA (000009) and Lough Kinale And Derragh Lough NHA (000985).
Proposed Natural Heritage Areas (pNHAs) ²⁵	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 21 pNHAs within, partially within, or adjacent to the County boundary, including: Annagh Lough (Ballyconnell) (000974), Black And Derrygoony Loughs (001596), Blackrock's Cross (000976), Bruse Hill (000002), Clonty Lough (000977), Cootehill Church (000003), Cordonaghy Bog (000978), Corratirrim (000979), Cuilcagh – Anierin Uplands (000584), Dromore Lakes (000001), Drumcor Lough (001841), Drumkeen House Woodland (000980), Glasshouse Lake (000983), Kilconny Bog (Cloghbally) (000006), Lough Garrow and Lough Gubdoo (000984), Lough Gowna (000992), Lough Macnean Upper (000986), Lough Oughter and Associated Loughs (000007), Lough Ramor (000008), Lough Sheelin (000987), and Madabawn Marsh (000988).
Flora Protection Order Sites ²⁶	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 supercedes orders made in 1980, 1987, 1999 and 2015. There is one location within the County protected by the Order: Cuilcagh (Hamatocaulis vernicosus).
Wildfowl Sanctuaries ²⁷ (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. There are three Wildfowl Sanctuaries within or partially within the County: Lough Oughter Group (WFS-01); Lough Ramor (WFS-03); and Dartrey/Fairfield (WFS-04).
Salmonid Waters ²⁸	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>). There are no designated salmonid river channels that flow within the County boundary.
CORINE Landcover ²⁹	Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface.

²⁴ [Natural Heritage Areas \(NHA\) | National Parks & Wildlife Service \(npws.ie\)](#)

²⁵ [EPA Maps](#)

²⁶ [Flora Protection Order Map Viewer \(npws.ie\)](#)

²⁷ [Wildfowl Sanctuaries | National Parks & Wildlife Service \(npws.ie\)](#)

²⁸ [Register of Protected Areas - Salmonid Water Regs Table - Datasets - data.gov.ie](#)

²⁹ [EPA Maps](#)



Environmental Features	Description
	The most dominant land cover type is agricultural pastures throughout the whole County. Coniferous forests and semi-natural areas exist in relatively small areas scattered across the County. Heterogeneous agricultural areas and wetlands are concentrated in the northwest. Urban fabric/Artificial surfaces are located in towns scattered across the County, especially in Cavan town.
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 within or adjacent to the County.
Nature Reserves ³⁰	A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organisations or private landowners. There are no Nature Reserves within or adjacent to the County boundary.

A number of protected sites in Northern Ireland within the theoretical zone of influence of the boundary of the local authority functional area have also been considered in this baseline evaluation, such as: Upper Lough Erne ASSI (UK9020071), Cuilcagh Mountain ASSI (UK0016603), Marlbank ASSI (ASSI1375), Gortalughany ASSI (ASSI366) and Cladagh (Swanlinbar) River ASSI (UK0030116).

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

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

	Description
Ecological connectivity and networks (including stepping stones and corridors)	Riparian habitats, hedgerow 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 (see Section 1.5) and has followed elements of Integrated Biodiversity Assessment with reference made to the EPA's 2013 *Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual*.

³⁰ [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 bats³¹, breeding birds³², badgers³³ etc. as well as all related species listed within the Flora (Protection) Order, 2022 (S.I. No. 235 of 2022)³⁴.

4.3.2 Key Issues Related to the LACAP

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

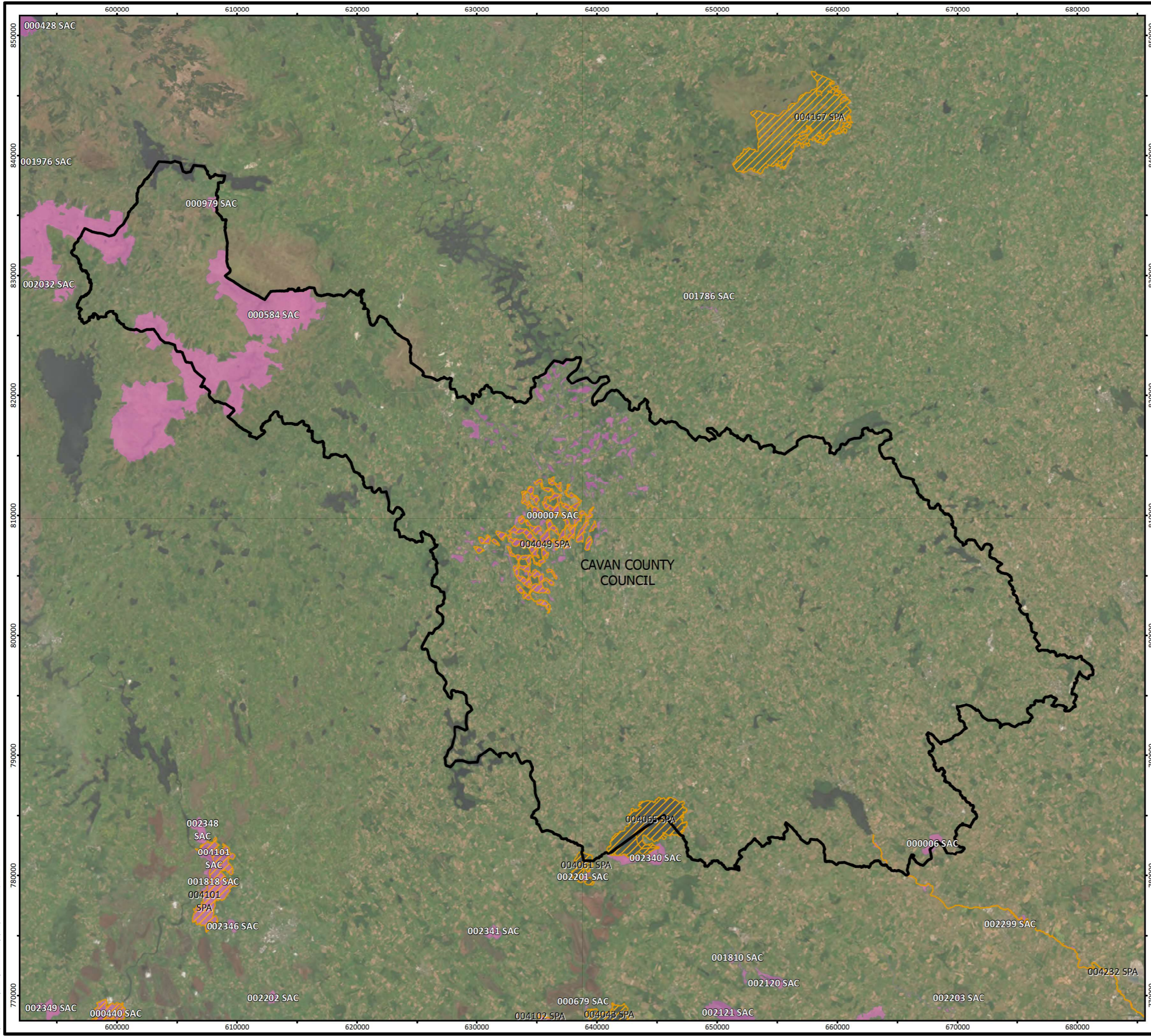
- Route selection and classification criteria are a key consideration in the development of blueways and greenways within the LACAP due to the largely linear nature of these developments.
- The potential for effects on non-designated biodiversity features e.g. important habitats and species outside designated 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.

³¹ 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.

³² Irish Wildlife Acts, 1976 (as amended)

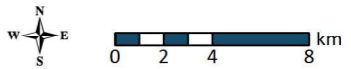
³³ Irish Wildlife Act 1976 (as amended) and Bern Convention Appendix III

³⁴ Which gives legal protection to 68 species of vascular plants 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). The current list of plant species protected by Section 21 of the Wildlife Acts is set out in the Flora (Protection) Order, 1999 (as amended).



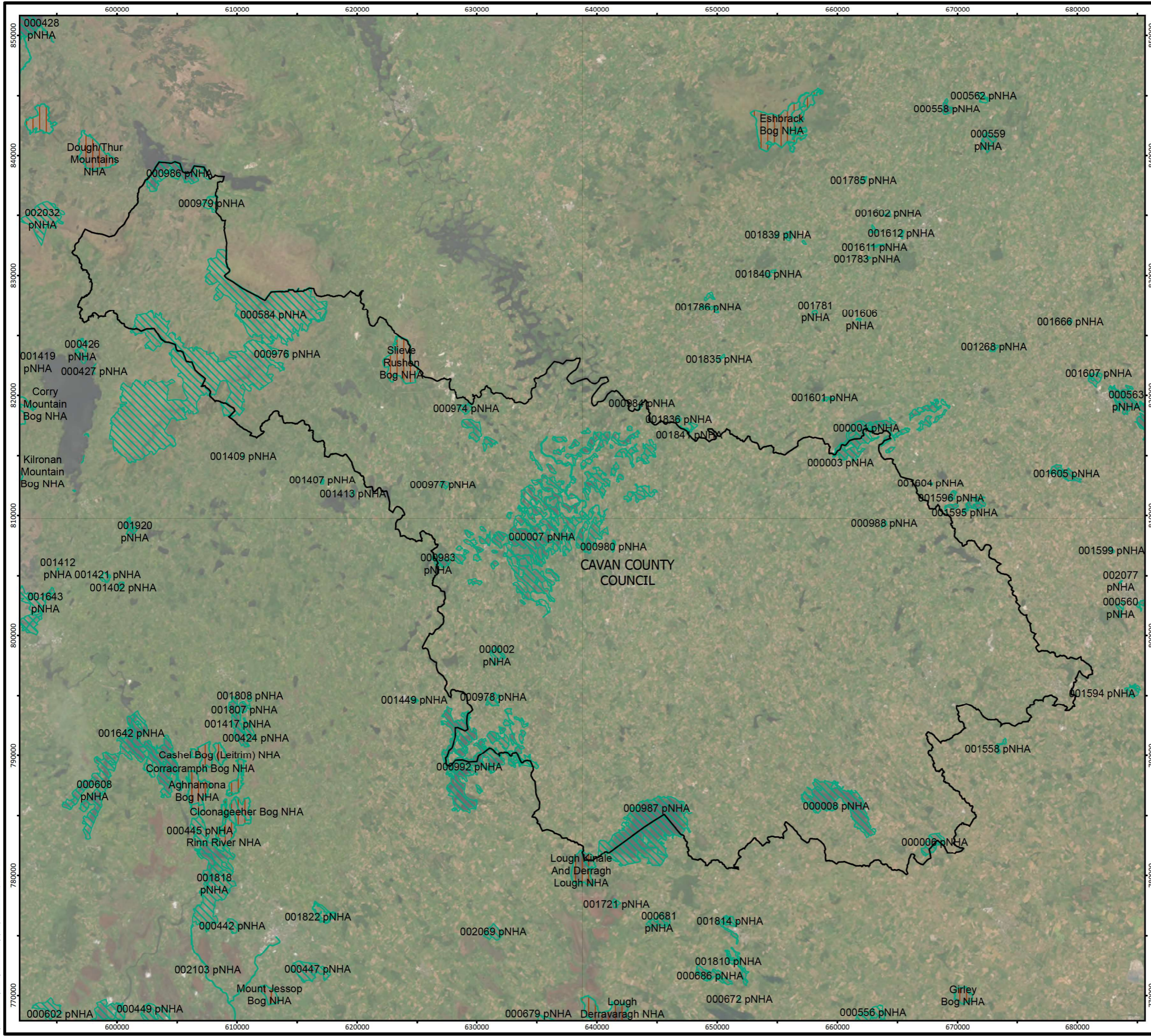
Legend

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

Special Areas of Conservation and Special Protected Areas	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.3
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:312,500 @ A3
	

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Legend

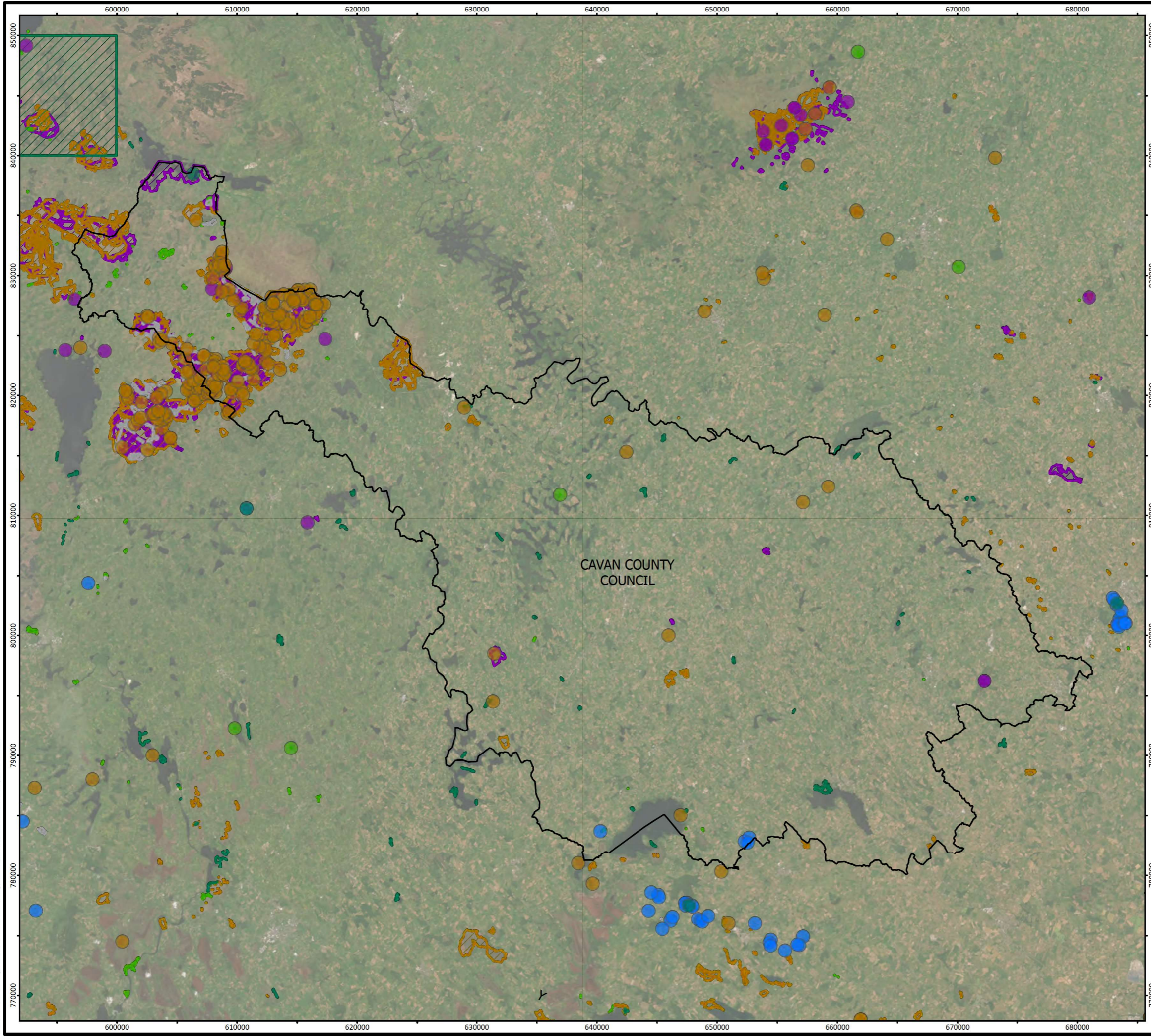
- Local Authority Boundaries
- Natural Heritage Areas
- Proposed Natural Heritage Areas

Natural Heritage Areas and proposed Natural Heritage Areas in Ireland	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.4
CLIENT:	CAVAN COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:312,500 @ A3

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 World Imagery: Earthstar Geographics
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 Path: R:\Map Production\2023\P23-076\Workspaces\SEA\SEA_ER_Fig_4.4 Natural Heritage Areas and proposed Natural Heritage Areas in Ireland.aprx

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 World Imagery: Earthstar Geographics
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 NPWS/Article17/Habitats/terrestrial: National Parks and Wildlife Service of Ireland (NPWS), An Seibbhís Páirciamas Náisiúnta agus Fíadhúla
 Department of Housing, Local Government and Heritage, An Roinn Tithíochta, Rialtas Áitiúil agus Oidhreacht



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

Potential Habitat Sensitivities - Areas likely to contain Annex I habitats	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.5
CLIENT:	CAVAN COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:312,500 @ A3





4.4 Landscape & Visual Amenity

4.4.1 Characterisation of the Environmental Baseline

Cavan has a diverse landscape, characterised by highlands in the east of the County, Cuilcagh-Anierin uplands in the north-west of the County and drumlin and lakelands throughout.

To date, Cavan County Council has not prepared a Landscape Character Assessment. Landscape Categorisation³⁵ for County Cavan by the County Council identifies 5 main Landscape Character Areas. In addition to this, 17 Scenic Viewing Points and 3 scenic routes have been identified³⁶. These comprise of:

Table 4-3: Landscape Character Areas, Scenic Viewing Points and Scenic Routes

Environmental Features	Description
Landscape Character Areas	<ul style="list-style-type: none"> • Cuilcagh-Anierin Uplands of West Cavan • The Lakelands (includes Cavan Town and Environs) • Lake Catchments of South Cavan • Drumlin Belt and Uplands of East Cavan • Highlands of East Cavan
Scenic Viewing Points	<ul style="list-style-type: none"> • SV1 - Gortnahill (N16) • SV2 - Altachullion • SV3 - Cornagee • SV4 - Dunmakeever • SV5 - Bellavally Gap • SV6 - Belville Tower • SV7 - Drumauna • SV8 - Lough an Leagh Gap • SV9 - Annagh Lake • SV10 - Lisnananagh • SV11 - Drumgarry • SV12 - Inishmore • SV13 - Rann Point • SV14 - Bleanacup • SV15 - Inchin • SV16 - Derrygid • SV17 - Drumcalpin
Scenic Routes	<ul style="list-style-type: none"> • SR1 - Regional Road 200-1 Dowra to Glangevlin to Blackrocks Cross • SR2 - Local Road 1012 and 1013, Blacklion to Glangevlin • SR3 - Local Road 5010, Regional Road 206-2 and Local Road 1012 Dowra to Blacklion (Kingfisher Cycle Trail)

³⁵ Cavan County Development Plan 2022-2028, Chapter 10.16: Landscape Categorisation – Analysis of County Cavan

³⁶ Cavan County Development Plan 2022-2028, Appendix 16: Scenic Views and View Points Map



Landscape character areas, seascape character areas and any sites designated for their landscape/visual sensitivity in Northern Ireland within the theoretical zone of influence of the boundary of the local authority functional area have also been considered in this assessment, such as: Mourne AONB and Rig of Gullion AONB.

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

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

- Cavan environmental sensitivity mapping.
- The National Landscape Strategy for Ireland.
- Tree Preservation Orders.
- Forest cover/Indicative Forest Strategies³⁷.
- Cavan County Development Plan 2022-2028.
- County Landscape Categorisation.

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 protected³⁸. The SEA Environmental Report has included information on the archaeological heritage of Cavan. One of the primary sources of information for known archaeological features is the Record of Monuments and Places (RMP)³⁹. The RMP is an inventory of sites and areas of archaeological significance.

There are hundreds of Recorded Monuments within the County. These include round towers, high crosses, burial sites, ringforts, tower houses, fulacht fia, raths, court tombs, portal tombs, wedge tombs, cairns, earthworks, abbeys, and souterrains. There are 7 recorded National monuments on the RMP which are in State Care. The locations of the known archaeological sites, including sites of architectural heritage interest in Northern Ireland, are detailed in Figure 4-6.

³⁷ Department of Agriculture, Food and the Marine

³⁸ National Monuments Acts 1930 (as amended), the National Cultural Institutions Act 1997 (as amended) and the Planning and Development Act 2000 (as amended)

³⁹ 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)



The SEA Environmental Report has also included information on the architectural heritage of County Cavan including that relating to designations such as the Record of Protected Structures (RPS). Local authorities compile and maintain the RPSs⁴⁰; these RPSs are listed in Appendix 19 of the CDP. There are about 900 entries to the Record of Protected Structures within the County⁴¹.

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)⁴². 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 heritage⁴³.

The Department of Housing, Local Government and Heritage has developed the Heritage Ireland 2030⁴⁴ 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 currently 16 designated ACAs within the County; Farnham Street ACA (Cavan Town), Bridge Street ACA (Cavan Town), Lurgan Quarter (Virginia) ACA, Lower Market Street, Cootehill ACA, Kingscourt ACA, Mullagh ACA, Redhills ACA, The Diamond (Belturbet) ACA, Bawnboy ACA, The Lawn (Belturbet) ACA, Dowra ACA, Blacklion ACA, Kilnaleck ACA, Mount Nugent ACA, Bailieborough ACA and Butlersbridge ACA.

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

- The Department of Arts, Heritage Regional, Rural and Gaeltacht Affairs⁴⁵ (including underwater archaeology such as wreck data⁴⁶)
- National Monuments Service (including the Underwater Unit)
- Built Heritage and Architectural Policy Section (the NIAH)⁴⁷
- Cavan County Development Plan 2022-2028
- Heritage Council
- United Nations Educational, Scientific and Cultural Organisation (UNESCO)

⁴⁰ Under Section 51 of the Planning & Development Act 2000 (as amended).

⁴¹ Cavan County Development Plan 2022-2028, *Appendix 19: List of Protected Structures*.

⁴² 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-datasets)

⁴³ Department of Housing, Local Government and Heritage. 2015. Advice to the Public on Ireland's Underwater Archaeological Heritage

⁴⁴ Available at [Heritage Ireland 2030 | gov.ie/housing \(www.gov.ie\)](https://www.gov.ie/housing)

⁴⁵ Department of Arts, Heritage and the Gaeltacht

⁴⁶ Available at [Wreck Viewer | National Monuments Service \(archaeology.ie\)](https://www.archaeology.ie/wreck-viewer)

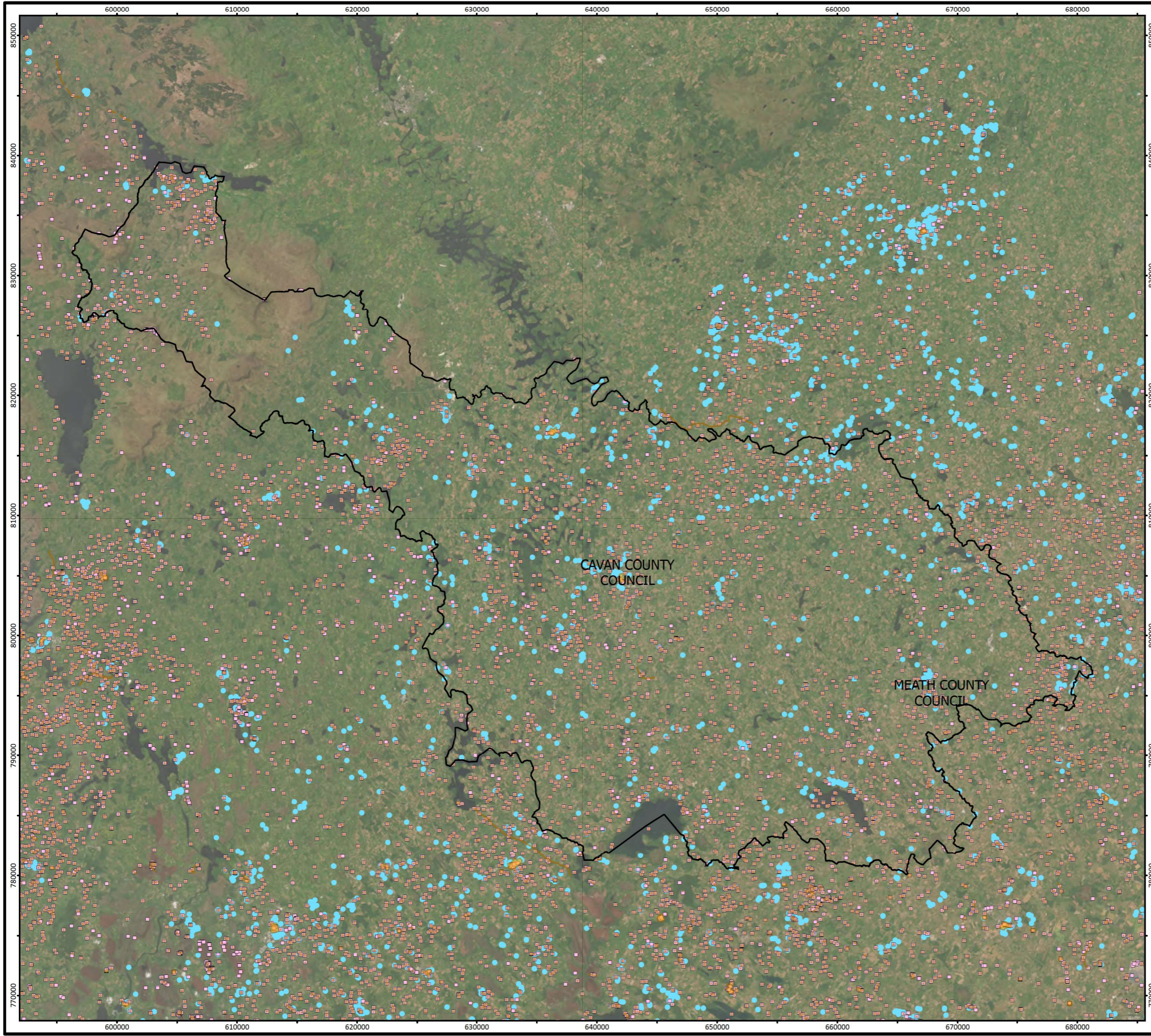
⁴⁷ Data available at [National Inventory of Architectural Heritage \(NIAH\) National Dataset - Datasets - data.gov.ie](https://data.gov.ie/dataset/national-inventory-of-architectural-heritage-niah-national-dataset-datasets)







4.5.2 Key Issues Relating to the LACAP

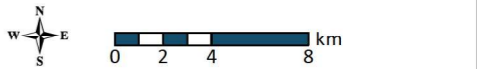
The key issues in relation to Cultural Heritage were as follows:

- 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.



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

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Archaeological Heritage and National Monuments Map	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.6
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:312,500 @ A3
	





4.6 Soils

4.6.1 Characterisation of the Environmental Baseline

The types of soils found covering the County⁴⁸ include the following:

Table 4-4: Soil Types Covering the County

Soil Type	Description
Dominant Soils	
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 cover most of the County.
Brown Earths / Acid Brown Earths	Brown earths are well drained mineral soils, associated with high levels of natural fertility. These are found underlying most of the County as subsoil but are principally found along the southern and eastern borders of the County.
Peaty Gleys	These are poorly drained soil with peaty topsoil. They have poor soil physical properties, suitable mainly to spruce species but unsuitable to broadleaf species. These are found as subsoil associated with gleys, covering most of the County, but are concentrated in the west.
Other Soils	
Brown Podzolics	Brown podzolic soils are characterised by dark brown humus-mineral soil covered with a thin mat of partly decayed leaves. These soils are found as subsoil along the southern border.
Alluvial soils	These are associated with alluvial (clay, silt or sand) river deposits. These are found in the flood plains of rivers and streams.

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. Peat bogs are found covering small areas scattered across the County but is mostly concentrated in the west as upland bog, which is of international importance; Cuilcagh - Anierin Uplands SAC.

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

The audit of County Geological Sites in County Cavan was completed in 2013 and identified 28 County Geological Sites⁴⁹. Previous Landslide Events and Landslide Susceptibility Mapping sources have been considered by the SEA.

⁴⁸ Teagasc.ie. General Soil Map.

⁴⁹ Geological Survey of Ireland (2013). The Geological Heritage of Cavan.



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

- Geological Survey Ireland (GSI)
- Teagasc
- EPA

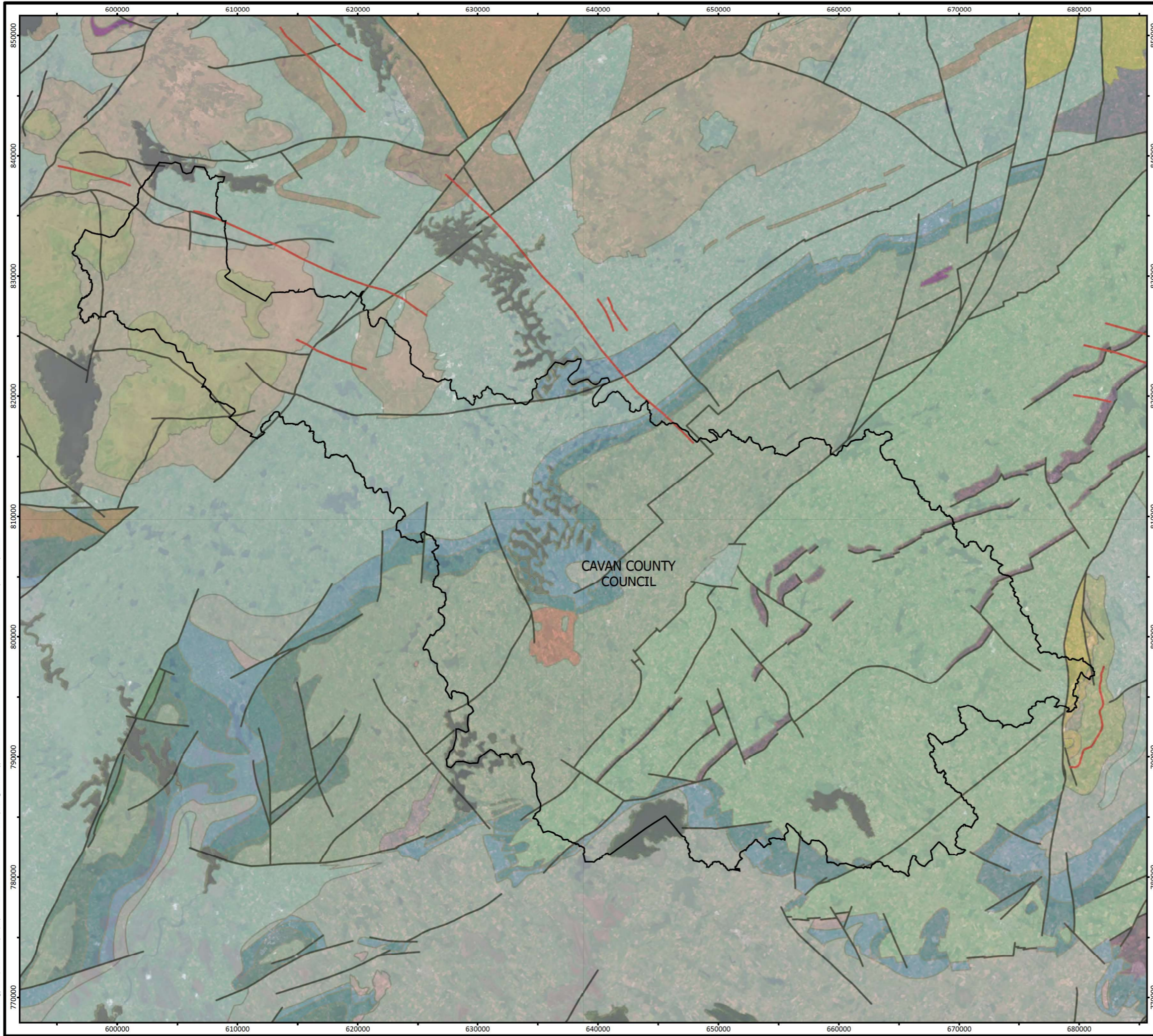
There is no legislation solely directed to soil protection in Ireland. In 2006, the European Commission (EC) developed a Soil Thematic Strategy that aims to protect soils and ensure the sustainable use of soils across Europe. Although a proposal for a Soil Framework Directive was withdrawn in 2014, the 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.

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 Bedrock Geology 1:500,000 Ireland (ROI/NI) (TM) Contains Irish Public Sector Data (Geological Survey) licensed under a Creative Commons Attribution 4.0 International [CC BY 4.0] Licence

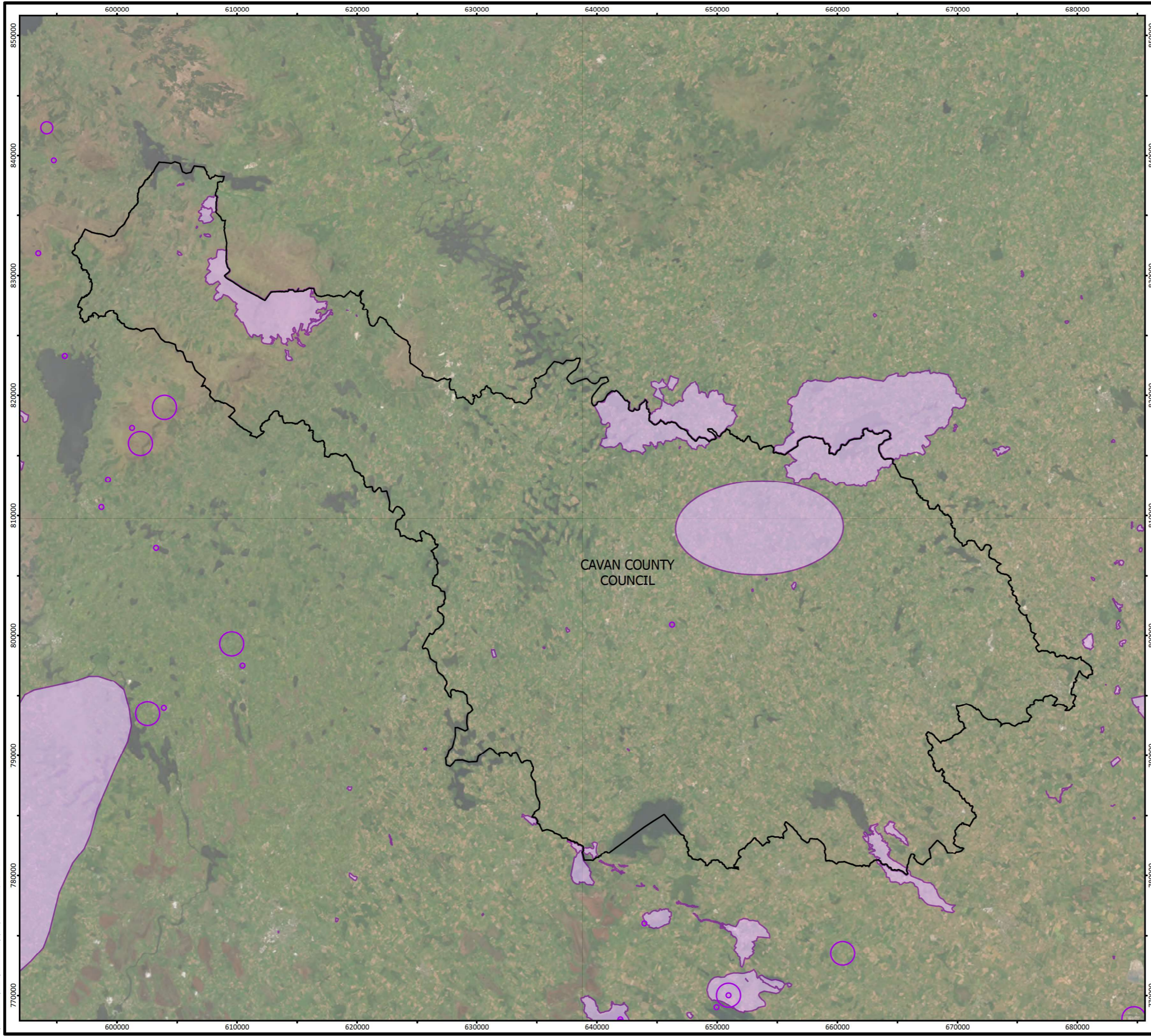


- Legend**
- Local Authority Boundaries
 - Bedrock Geology 500k (ROI/NI)**
 - 8, Granite, granodiorite
 - 11, Dolerite & gabbro
 - 37, Basalt - andesite, tuff, slate & mudstone
 - 39, Deep marine; Slate, shale, minor sandstone & siltstone
 - 40, Marine to fluvial; Greywacke, shale, sandstone & conglomerate
 - 42, "Moffat shale" facies (Ordovician - Silurian); Shale & greywacke
 - 49, Deep marine turbidite sequence; Mudstone, greywacke & conglomerate
 - 52, Continental redbed facies; Sandstone, siltstone & mudstone (base of Dingle Group is in the Upper Silurian)
 - 59, Shallow marine & coastal plain (basal clastics); Sandstone, mudstone & conglomerate
 - 60, Shallow & marginal marine (Navan Group); Dark-grey limestone, mudstone, sandstone, minor evaporite
 - 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
 - 66, Marginal marine (Mullaghmore, Downpatrick & Clogher Valley Fms); Sandstone, mudstone & evaporite
 - 68, Marginal marine (Meenymore Formation); Mudstone, sandstone & evaporite
 - 71, Fluvio-deltaic & basinal marine (Turbiditic); Shale, sandstone, siltstone & coal
 - 72, Fluvio-deltaic & shallow marine; Shale, sandstone & siltstone with coal
 - 73, Continental redbed facies & shallow marine; Sandstone, conglomerate, magnesian limestone, marl, evaporite
 - 75, Continental redbed facies, lagoonal & shallow marine; Sandstone & mudstone with evaporite

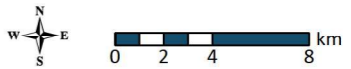
Bedrock Geology	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.7
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:312,500 @ A3



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

Geological Heritage Sites	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.8
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:312,500 @ A3
	





4.7 Land Use

4.7.1 Characterisation of the Environmental Baseline

Information on land use in County Cavan can be obtained from the CORINE Land Cover (CLC) inventory. The data source has archives which document land use change as well as existing land use.

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

Land use mapping data for the Republic of Ireland and Northern Ireland is presented in Figure 4-9.

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

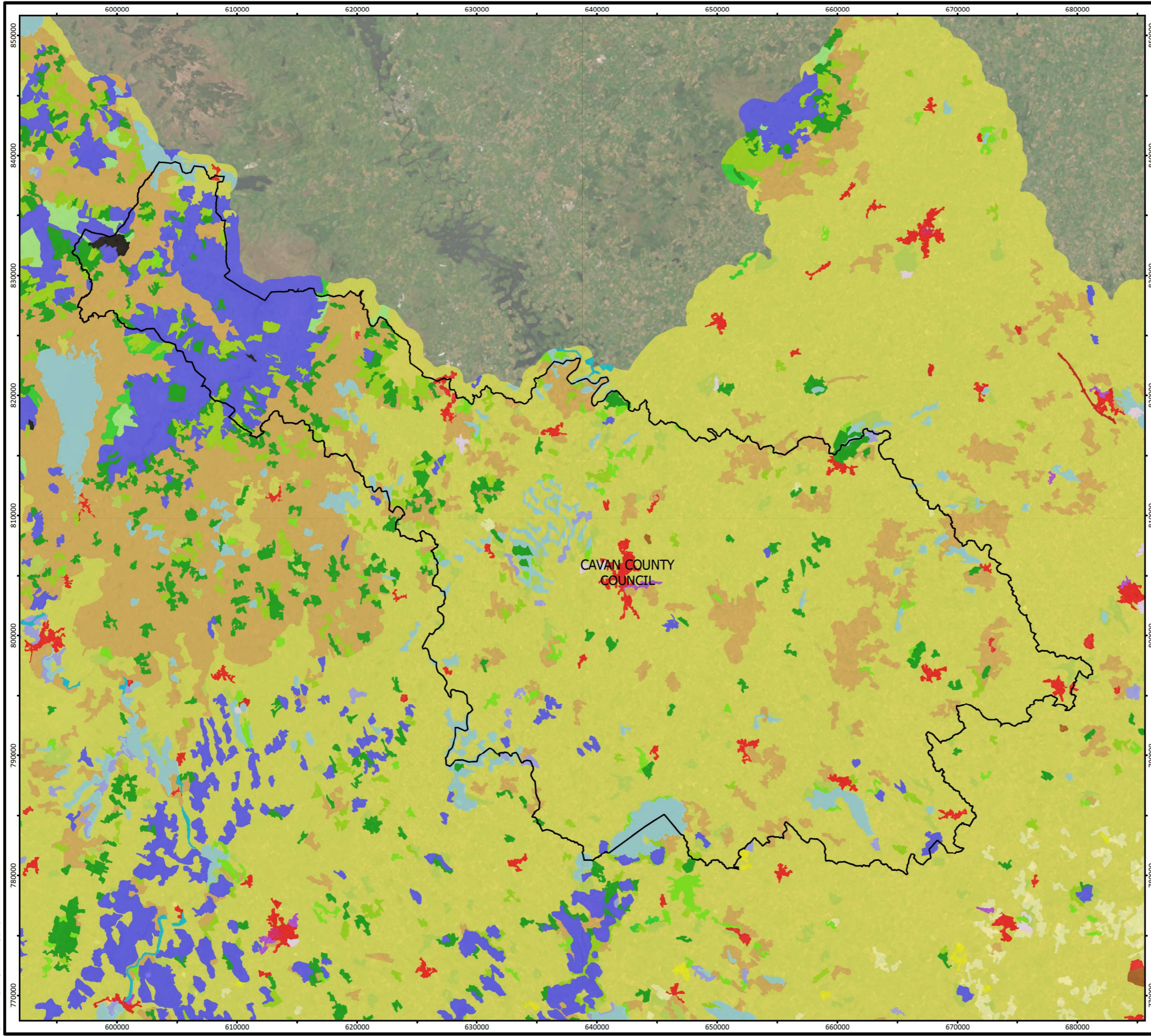
- CORINE Land Cover Database
- Teagasc
- EPA
- NPWS
- Forest Service
- GSI data

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.

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



- 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
 - 131 Mineral extraction sites
 - 132 Dump
 - 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
 - 334 Burnt areas
 - 411 Inland marshes
 - 412 Peat bogs
 - 423 Intertidal flats
 - 511 Stream courses
 - 512 Water bodies

Land Use (CORINE)	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.9
CLIENT:	CAVAN COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:312,500 @ A3



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 Path: R:\Map Production\2023\P23-076\Workspaces\SEA\SEA_ER_Fig_4.9 Land Use of Ireland.aprx



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 Organisation (WHO) (2021) guidelines⁵¹.

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

Under the Clean Air for Europe Directive [Directive 2008/50/EC], EU member states must designate "Zones" for the purpose of managing air quality. For Ireland, four zones were defined in the Air Quality Standards Regulations (2011). All areas in County Cavan are defined as 'Zone D'. The current air quality in the County (Cavan Town) is generally identified by the EPA as being of *Good*⁵² status.

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

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

- EPA
- WHO

⁵¹ World Health Organisation. 2021.WHO global air quality guidelines: particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide. World Health Organisation. <https://apps.who.int/iris/handle/10665/345329>. License: CC BY-NC-SA 3.0 IGO

⁵² [EPA AirQuality.ie](https://www.epa.gov/air-quality) - 31/07/2023

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

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

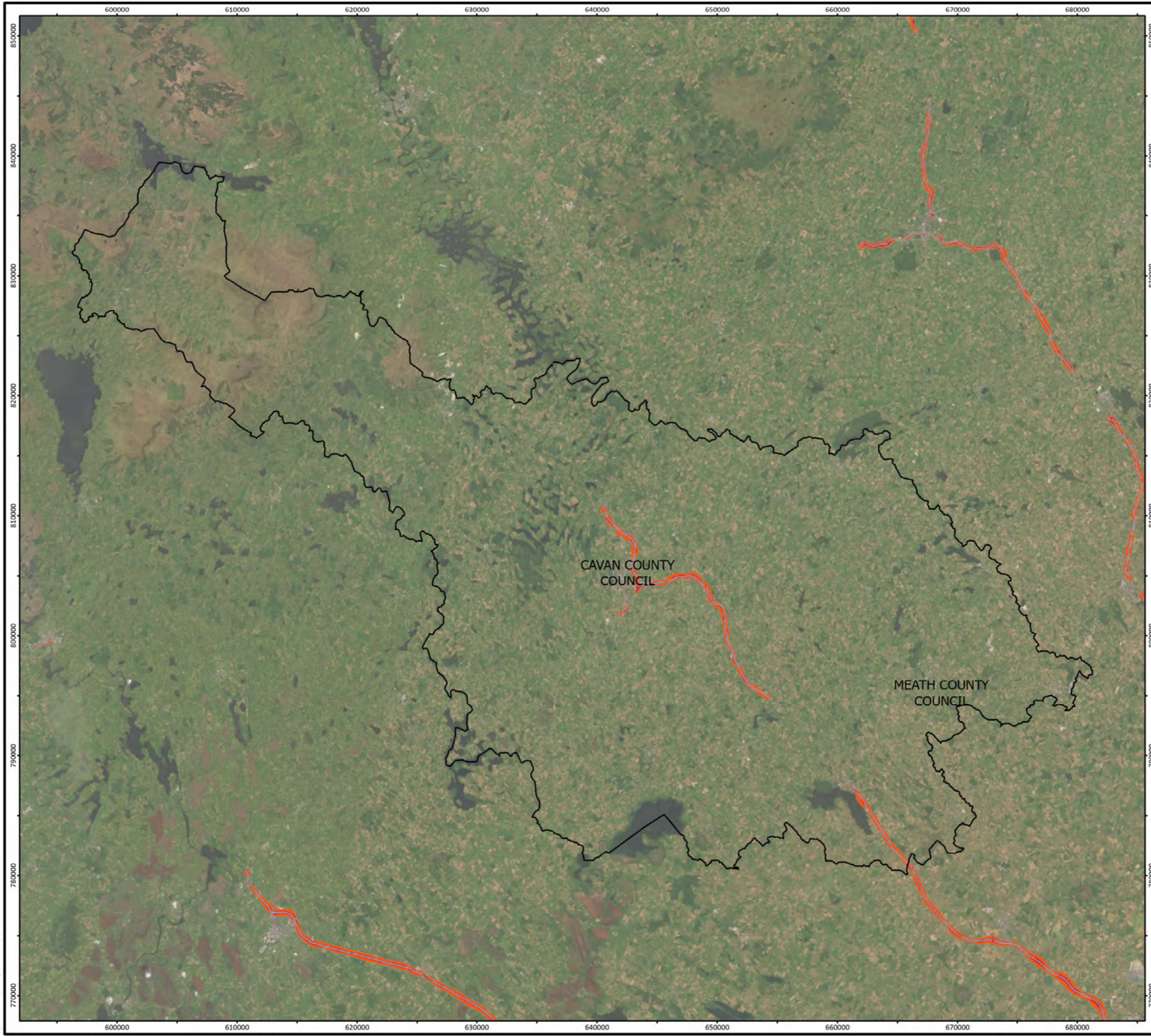


4.8.2 Key Issues Relating to the LACAP

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

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

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Legend

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

Noise Round 3 Rail - Lden

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

Noise Round 3 Road - Lden

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

Noise Round 3 Airport - Lden

Noise Mapping Lden (Day, Evening, Night; a measurement over 24 hours)	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.10
CLIENT:	CAVAN COUNTY COUNCIL
DATE:	29/08/2023
SCALE:	1:312,500 @ A3

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4.9 Water

4.9.1 Characterisation of the Environmental Baseline

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

Water quality data is collected by the EPA⁵⁵. Most of the County is situated within the Erne catchment (an area drained by the River Erne and all streams entering tidal water between Aughrus Point and Kildoney Point). The County is also partially drained by the catchments: Upper Shannon; Newry/Fane/Glyde/Dee; and Boyne.

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 County Cavan is generally identified as being of *Good* status.

The WFD status of rivers waterbodies (2016-2021) draining County Cavan ranges from high (sections of rivers and streams, including Blackwater (Kells), Swanlinbar, Blackwater (Newtowngore), Owennayle, Shannon (Upper) and Bellavally Stream), to good (sections of rivers and streams, including Lislea, Glyde, Dee, Blackwater, Stradone, Laragh, Annalee, Dromore, Bunnoe, Erne, Rag, Woodford, Bawnboy, Owensallagh, Swanlinbar River, Owengarr River, Owenmore, Shannon (Upper), Roo, and Owennayle), to moderate (sections of rivers and streams including: Fastry, May Hill, Erne, Annalee, Cullies, Mountnugent, Inny, Blackwater, Nadreegeel Lough Stream, Moynalty, Laragh and Madabawn Stream) and to poor (sections of rivers and streams including Cavan, Moynalty, Rag, Pound, Mountnugent, Nadreegeel Lough Stream, Woodford, Finn, Erne, Cullies, Oldtully, Blackwater, Annalee and Aghawonan).

Numerous lake waterbodies are scattered across the County. The WFD Status 2016-2021 for the lakes mostly range from moderate to poor. Two lake waterbodies (Nawelean and Nambrack) are of *High* status, however lake waterbodies such as Corglass and Lower Lough Macnean (County Fermanagh) are classified as *bad*.

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

Certain areas across the County are at risk of flooding from various sources including fluvial and estuarial. There are various historic and predictive indicators of flood risk in the County, including from Loughs Oughter, Sheelin, Ramor, Brackley, Lakefield, Bellaboy and along Rivers Cavan, Erne, Annalee, May Hill and Dromore.

⁵⁵ [EPA Maps](#). Water.



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. A total of 8 settlements were identified by the OPW in 2012 as requiring detailed assessment of flood risk (Areas for Further Assessment)⁵⁶. These areas are: Annagelliff, Ballyconnell, Bawnboy, Blacklion, Butlersbridge, Cavan, Mullagh and Virginia.

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. Mapping data for the Water Environment is presented in Figures 4-11 to 4-18, including, where available, baseline data for the Northern Irish water environment.

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) Mapping⁵⁷ (OPW).

4.9.2 Key Issues Relating to the LACAP

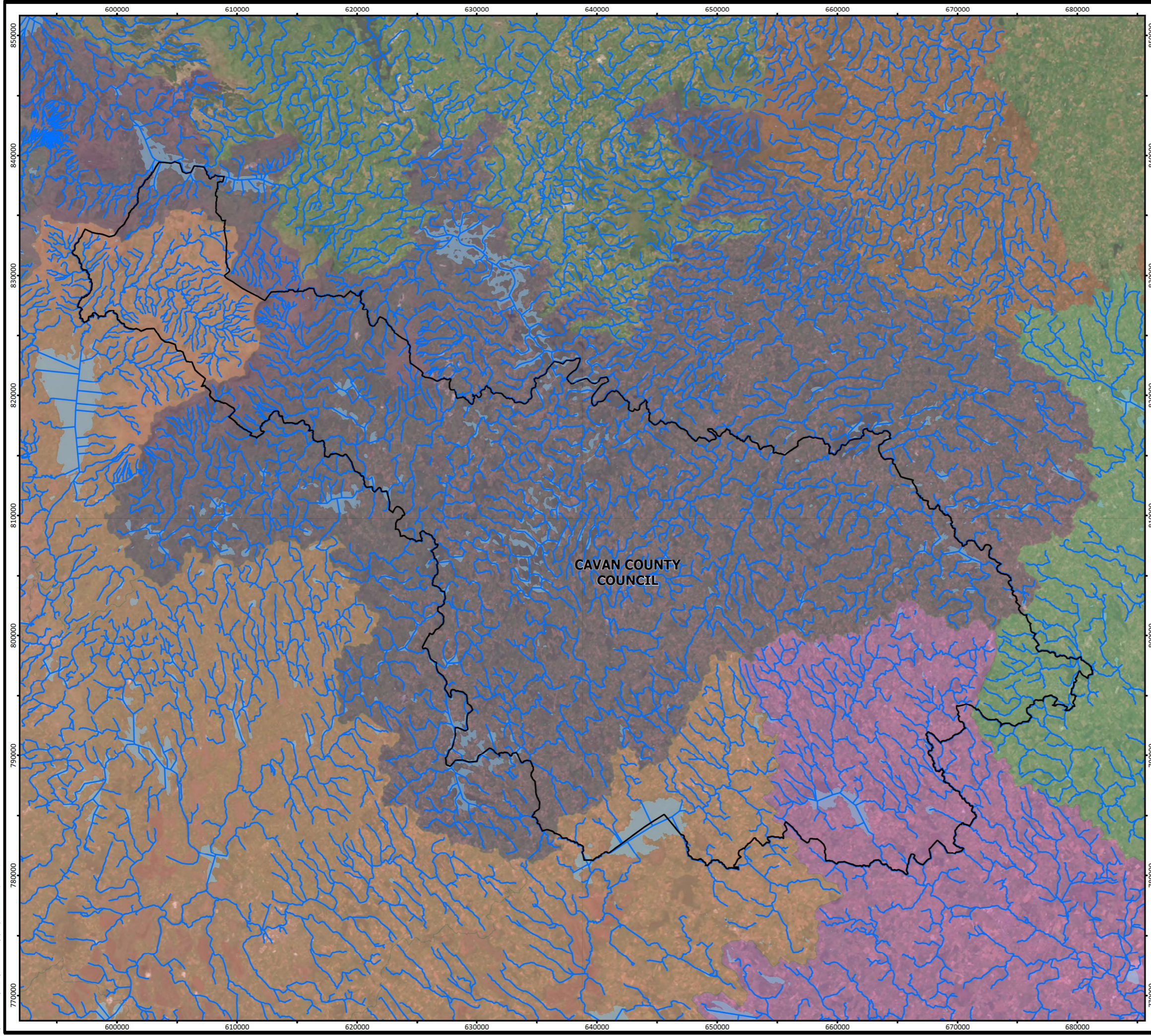
The key issues in relation to Water were as follows:

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

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

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

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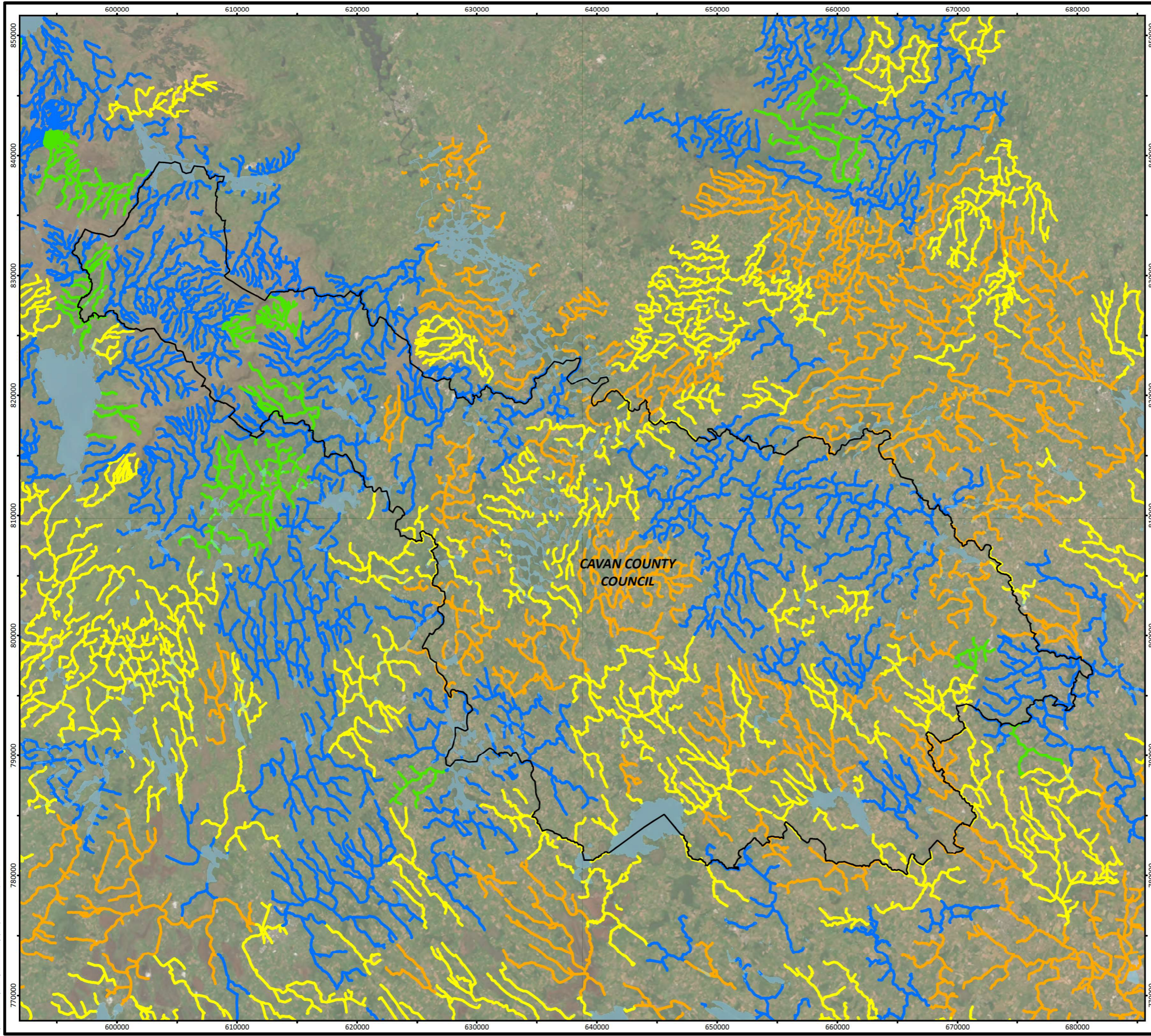


- Legend**
- Local Authority Boundaries
 - Rivers
- WFD Catchments**
- Catchment Name**
- Boyne
 - Erne
 - Lough Neagh & Lower Bann
 - Newry, Fane, Glyde and Dee
 - Sligo Bay & Drowse
 - Upper Shannon

Hydrology	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.11
CLIENT:	CAVAN COUNTY COUNCIL
DATE: 15/08/2023	SCALE: 1:312,500 @ A3



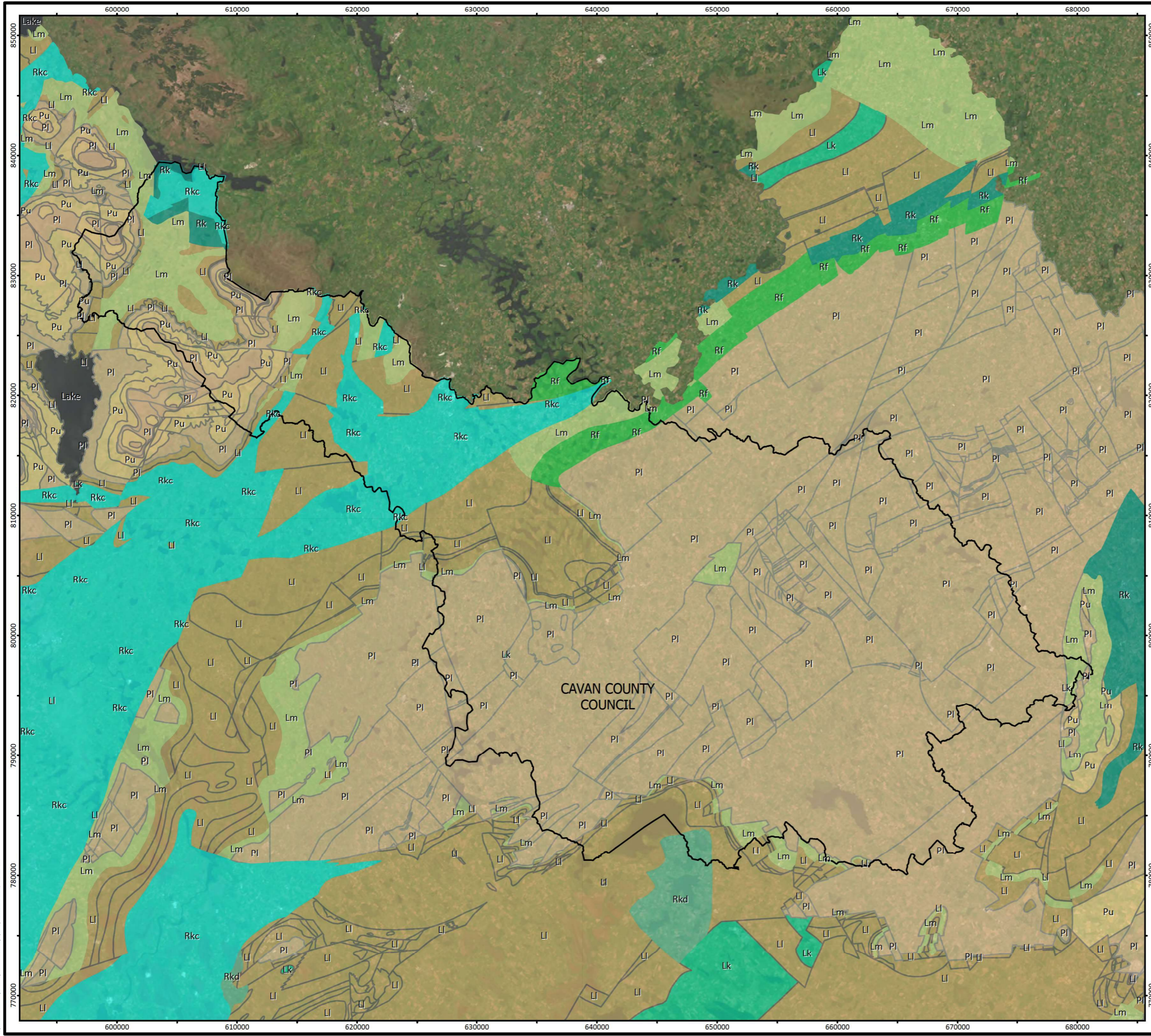
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- Legend
- Local Authority Boundaries
 - WFD Lake Segments
 - EPA Rivers - WFD Status 2016 - 2021
 - Bad
 - Poor
 - Moderate
 - Good
 - High
 - Unassigned

WFD Surface Water Status	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.12
CLIENT:	CAVAN COUNTY COUNCIL
DATE: 15/08/2023	SCALE: 1:312,500 @ A3



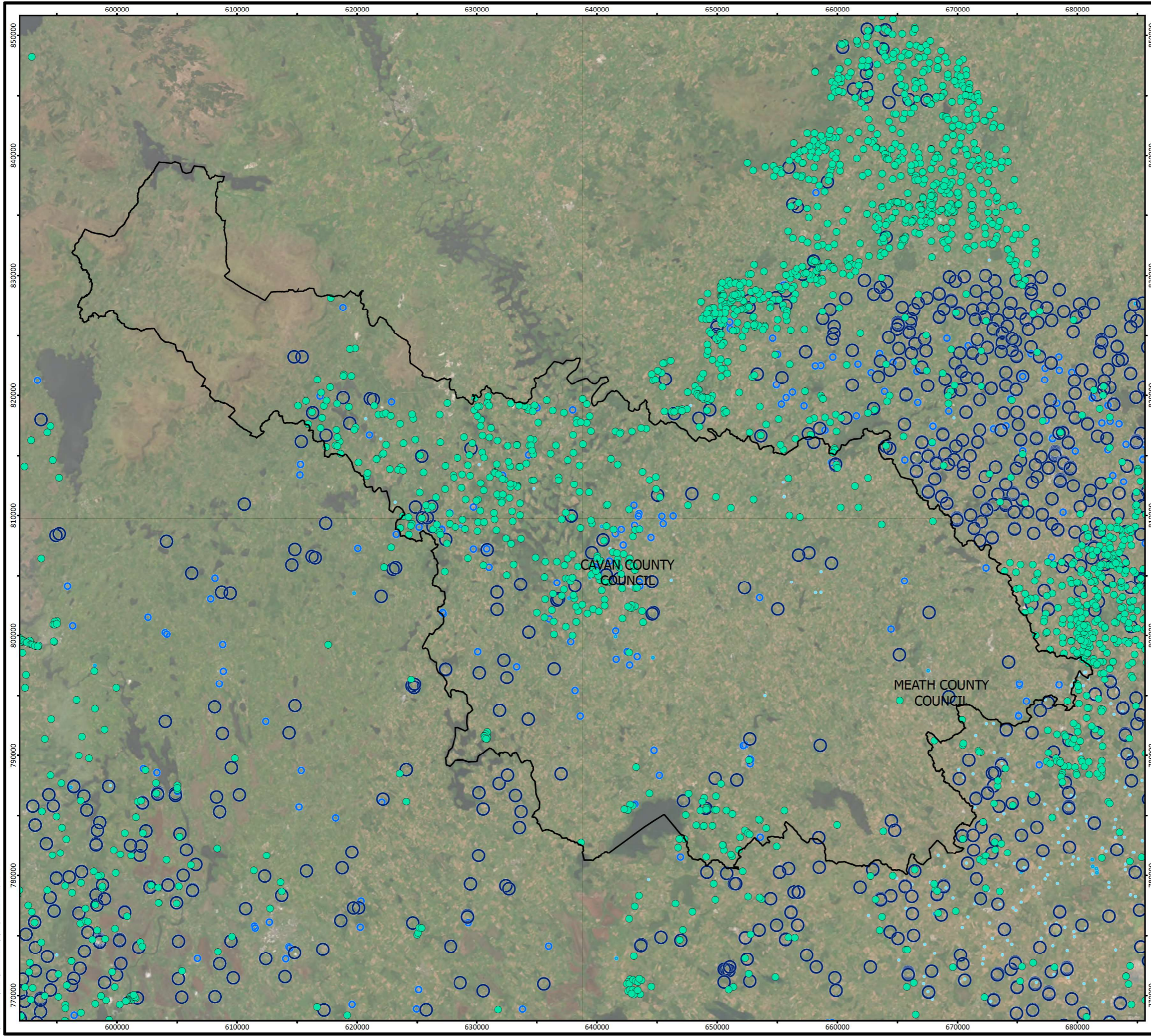








- Legend**
- Local Authority Boundaries
 - Bedrock Aquifers**
 - Lk: Locally Important Aquifer - Karstified
 - Ll: Locally Important Aquifer - Bedrock Mod Productive Locally
 - Lm: Locally Important Aquifer - Bedrock Generally Mod Productive
 - Pl: Poor Aquifer Bedrock Generally Unproductive Except Locally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

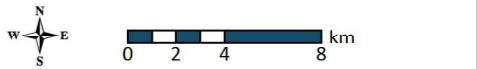
Aquifer Classification	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.13
CLIENT:	CAVAN COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:312,500 @ A3



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 Path: R:\Map Production\2023\23-076\Workspaces\SEA\SEA_ER_Fig_4-13 Aquifer Classification.aprx



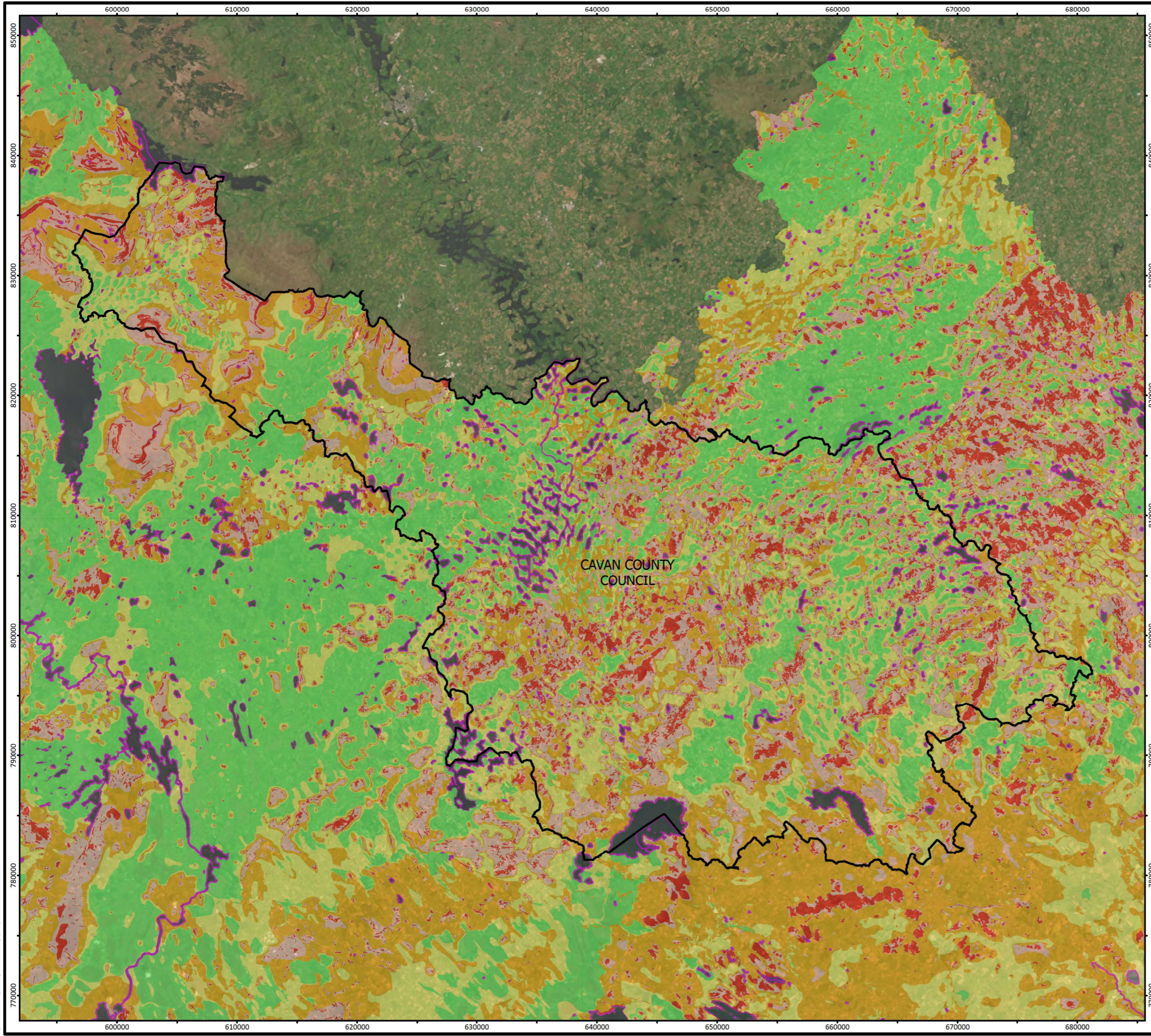
- Legend**
-  Local Authority Boundaries
 -  Wells and Springs (10-50m Accuracy)
 -  Wells and Springs (50-100m Accuracy)
 -  Wells and Springs (100-200m Accuracy)
 -  Wells and Springs (200-500m Accuracy)
 -  Wells and Springs (500m-1km Accuracy)

Wells and Springs	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.14
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:312,500 @ A3
	



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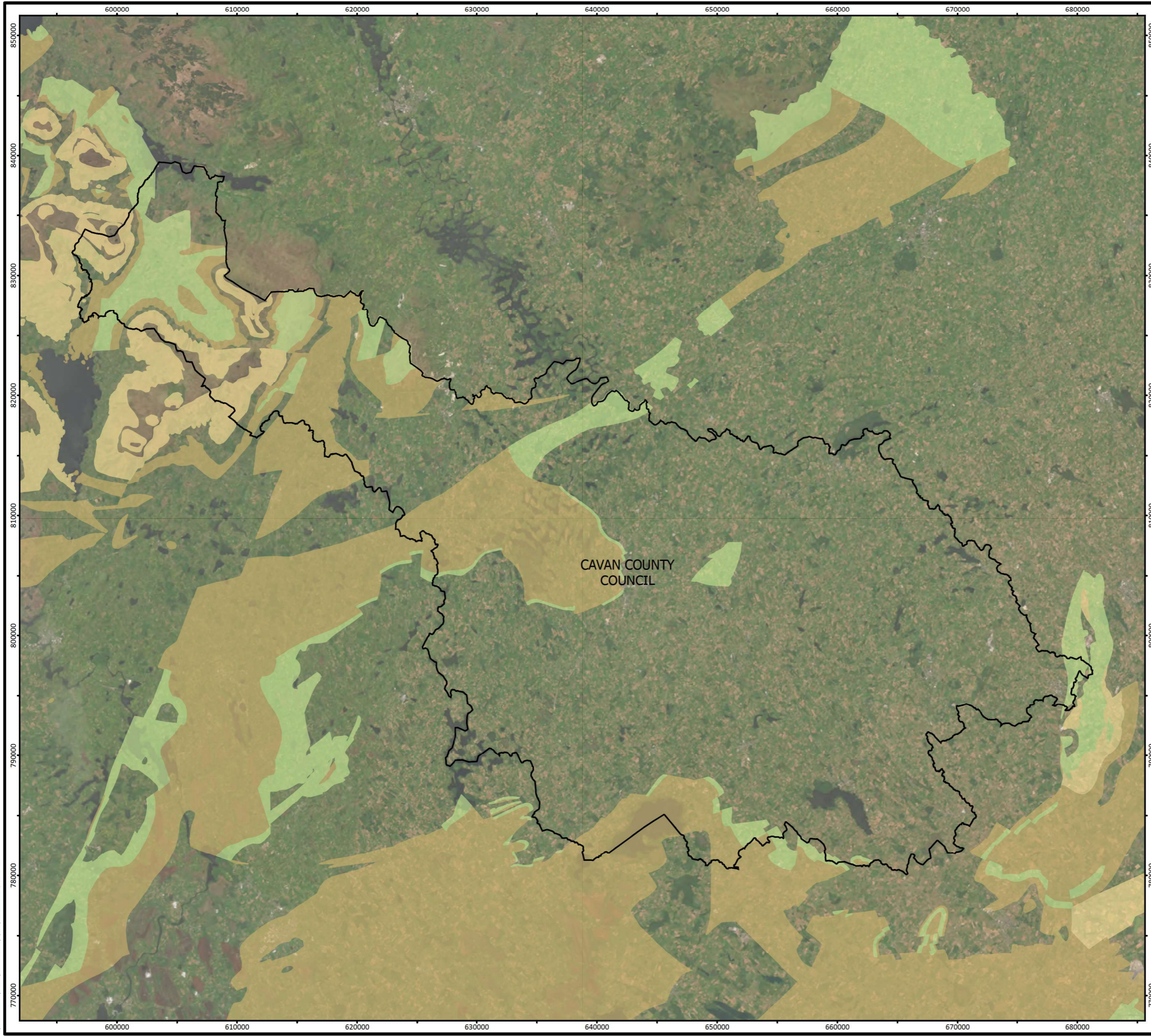
Legend





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


Groundwater Vulnerability	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.15
CLIENT:	CAVAN COUNTY COUNCIL
DATE: 15/08/2023	SCALE: 1:312,500 @ A3

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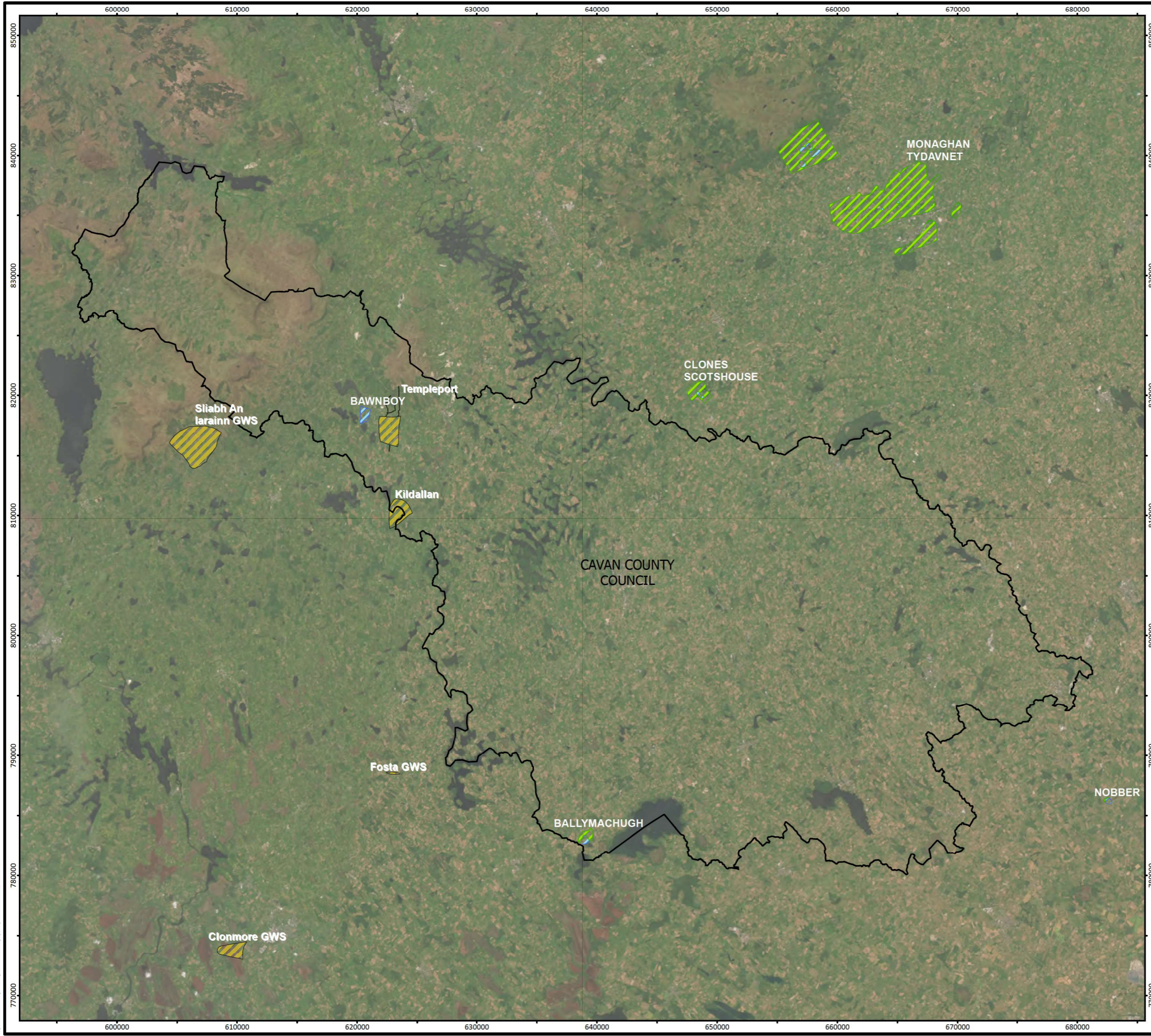


- Legend**
-  Local Authority Boundaries
 - Bedrock Aquifers**
 -  Ll: Locally Important Aquifer - Bedrock Mod Productive Locally
 -  Lm: Locally Important Aquifer - Bedrock Generally Mod Productive
 -  Pu: Poor Aquifer Bedrock Generally Unproductive

Groundwater Productivity	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.16
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:312,500 @ 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	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.17
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:312,500 @ A3

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






WFD Register of Protected Areas	
Bathing Water Areas	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18a
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 16/08/2023	SCALE: 1:312,500 @ A3




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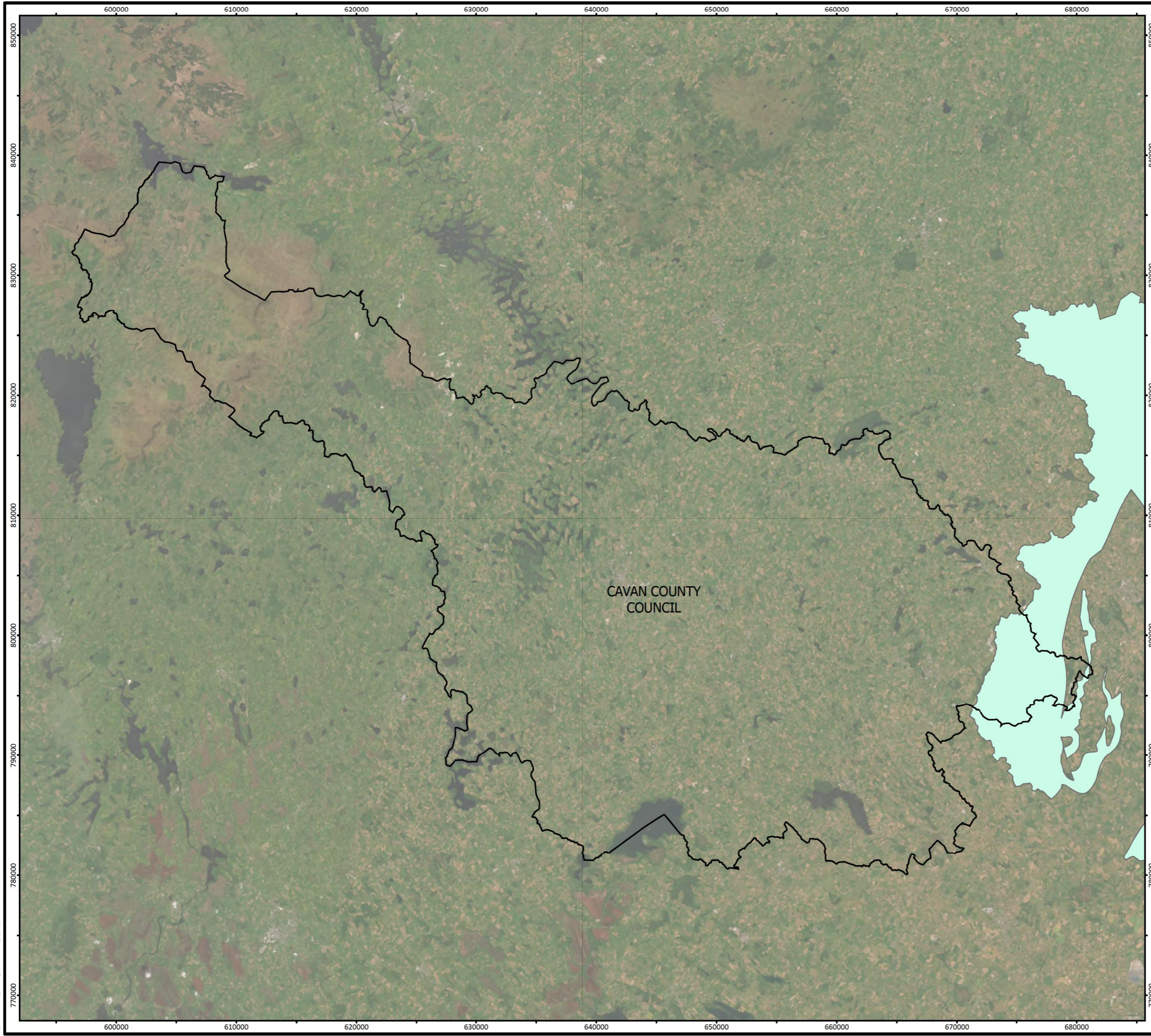


- Legend**
-  Local Authority Boundaries
 -  Officially designated under S.I. 293/1988
 -  WFD Groundwater Bodies that intersect with Designated Salmonid Waters
 -  WFD Groundwater Bodies that intersect with Designated Salmonid Waters
 -  WFD Surface Water Polygons that intersect with Designated Salmonid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

WFD Register of Protected Areas	
Salmonid	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18b
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 16/08/2023	SCALE: 1:312,500 @ A3
	



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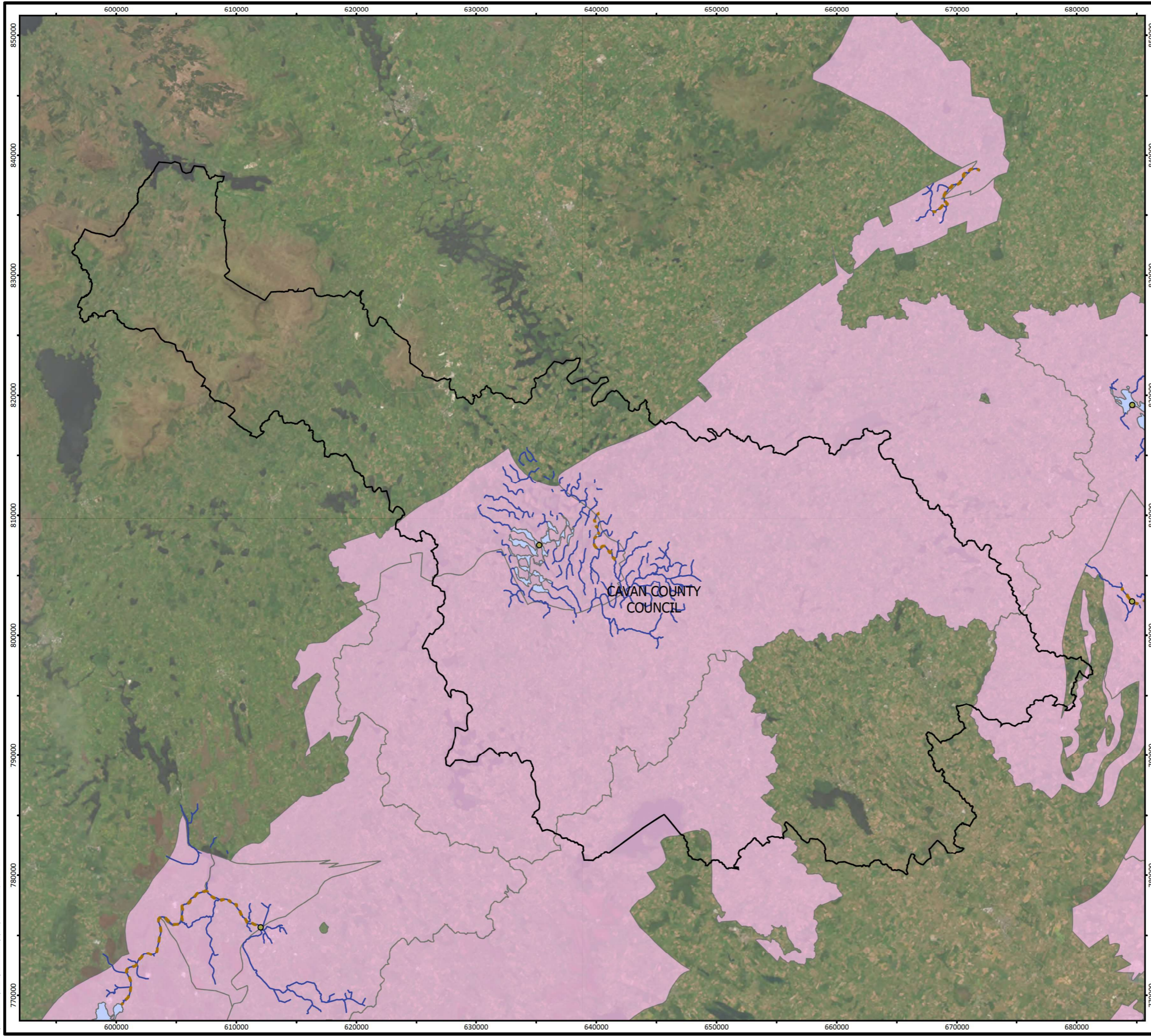
Legend

- Local Authority Boundaries
- WFD Groundwater Bodies that intersect with WFD_RPA_Shellfish

WFD Register of Protected Areas	
Shellfish Areas	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18c
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 16/08/2023	SCALE: 1:312,500 @ A3

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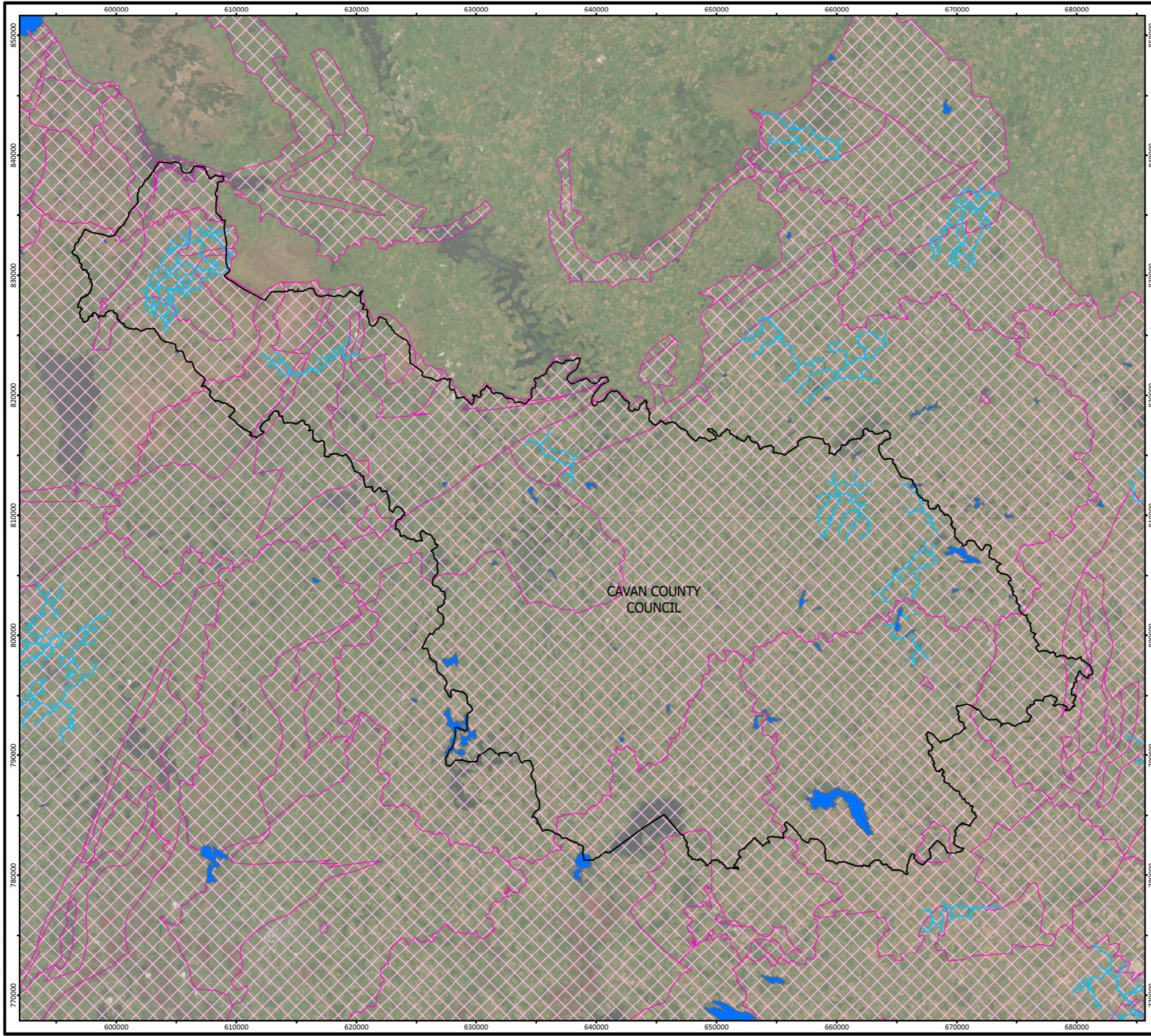


- Legend**
- Local Authority Boundaries
 - Designated Nutrient Sensitive Points
 - WFD Riverwater Bodies that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons)
 - Designated Nutrient Sensitive WFD_RiverwaterBodies
 - WFD Surface Water Polygons that intersect with Designated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

WFD Register of Protected Areas	
Nutrient Sensitive Areas	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18d
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 16/08/2023	SCALE: 1:312,500 @ A3



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Legend

- Local Authority Boundaries
- WFD Riverwater Bodies that are protected for drinking water
- WFD Lakewater bodies that are protected for drinking water
- WFD Groundwaters that are protected for drinking water

WFD Register of Protected Areas - Drinking Water	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.18e
CLIENT:	CAVAN COUNTY COUNCIL
DATE: 30/08/2023	SCALE: 1:312,500 @ A3

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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 soil⁵⁸, air and water (see Sections 4.6, 4.8 and 4.9).

4.10.1.1 *Water Services*

4.10.1.1.1 Wastewater

Wastewater demand and capacity information at settlements was considered by the SEA, where available, includes⁵⁹:

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

The EPA produces annual reports on the treatment of urban wastewater from cities, towns and urban communities. The latest EPA 2022 report⁶⁰ '*Urban Waste Water Treatment in 2021*' identifies the priority areas where resources must be targeted, in order to protect the environment from the harmful effects of waste water and deliver environmental improvements where they are most needed. Based on the EPA's assessment of monitoring information provided by Uisce Éireann and the enforcement activities carried out by the EPA, this report identifies urban areas with the most important environmental issues that must be addressed. A total of 3 urban areas in the County are listed as priority areas; Bailieborough, Blacklion, Mullagh.

4.10.1.1.2 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.

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

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

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



4.10.1.2 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, County Cavan was guided by the *Connacht Ulster Waste Management Plan 2015-2021* which provided the framework for solid waste management in the region. Post 2021, waste management in Ireland will be guided by the first *National Waste Management Plan for a Circular Economy*, which will replace the existing regional plans. This Plan sets out a framework for the prevention and management of waste in Ireland for the period 2023 to 2029.

4.10.1.3 Transport

County Cavan is traversed by five national primary routes – the N3, the N16, the N54, the N55 and the N87. The County and its rural areas are served by TFI's Bus Éireann and Local Link as well as a number of other private bus operators. There are no railway networks servicing the County.

County Cavan shares the international land border with Northern Ireland and is seen as a 'Gateway' to the Northern and Eastern Regions, providing fundamental connections with other urban centres in these regions. Both regional and local roads provide vital links between the towns and villages to retail, service and employment centres throughout the County and to adjoining counties.

Upcoming transport and active travel projects that will serve the County has been considered by the SEA, where available.

4.10.1.4 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. Further opportunity also exists to use nature-based solutions to provide better environments to live, work and visit and which are frequently a cheaper design solution compared to more traditional approaches.

The existing Green Infrastructure in the County boasts many key features and activities across the urban, rural and upland areas, including NHAs, SACs, SPAs, Areas of High Amenity, woodlands and boglands connected by walking routes, eskers and riparian ways.

4.10.1.5 Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the LACAP, 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.

4.10.1.6 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.



4.10.1.7 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.

4.10.1.7.1 Energy Related Material Assets and Infrastructure

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

- Climate Change Advisory Council
- Department of Defence,
- Department of Housing, Local Government, and Heritage (DHLGH)
- EPA
- 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

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

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



4.10.2 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.

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. Failte Ireland has recently published their four brand strategies⁶³ which will define the spatial scope and spread of future tourism developments within Ireland. County Cavan hosts 'Ireland's Hidden Heartlands' and the success of the brand strategy will result in infrastructure demands to previously less trafficked areas. 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 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.

⁶³ Wild Atlantic Way, Dublin's a Breath of Fresh Air, Ireland's Ancient East and Ireland's Hidden Heartlands



4.12 Climate Change

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

Future changes in climate and associated impacts on sea level, rainfall patterns/intensity and river flow will influence flooding frequency and extent in the future. Local Authorities in compliance with the Regional Planning Guidelines are attempting to adopt sustainable flood risk strategies in areas likely to be at risk of flooding in the future in the context of climate change and changing weather patterns. Changes to climate could lead to an increase in flooding events in Ireland. The OPW has undertaken a number of Flood Risk Management Studies for different River Basin Districts (RBDs) in Ireland. These studies have identified the areas which are most at risk and future management plans have been advised; these are adopted by the OPW. In some cases, mitigation measures will involve the construction of physical flood defences. The SEA 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 Studies⁶⁴

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.

⁶⁴ Office of Public Works (2021) Catchment-based Flood Risk Assessment and Management (CFRAM) Programme [gov.ie](http://www.gov.ie) - [CFRAM Programme \(www.gov.ie\)](http://www.gov.ie)



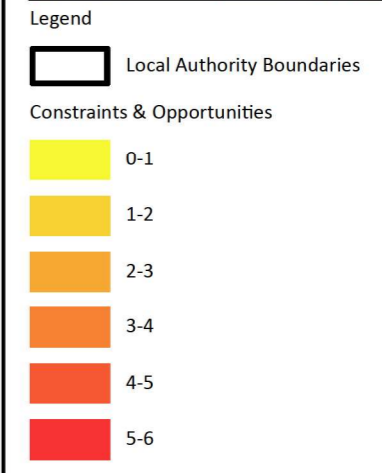
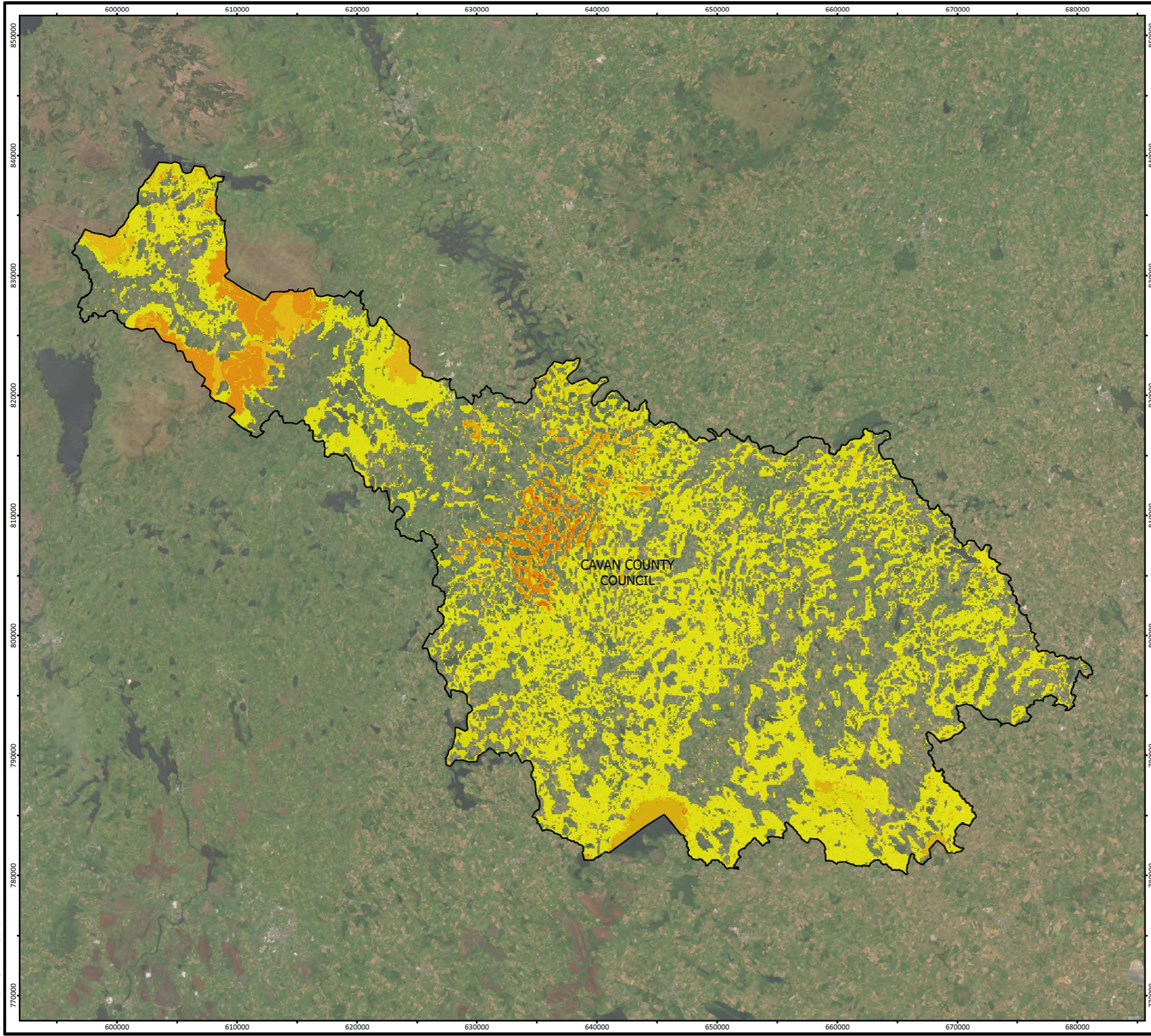
4.13 Constraints and Opportunities

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

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

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

Mapping Reproduced Under Licence from the Ordnance Survey Ireland Licence No. CHAL50216780 Government of Ireland Creative and Commons Attribution 4.0 International [CC BY 4.0] Licence <https://creativecommons.org/licenses/by/4.0/>.
World Imagery: Earthstar Geographics
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Constraints and Opportunities	
CAVAN COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	4.19
CLIENT: CAVAN COUNTY COUNCIL	
DATE: 08/09/2023	SCALE: 1:312,500 @ A3





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

The SEA Directive requires that consideration is given to the likely evolution of the baseline environment in the event the LACAP is not progressed and implemented. In the event the LACAP was not implemented; the baseline environment would primarily evolve in line with the development management standards and environmental protection criteria defined in Cavan County Development Plan (CDP) 2022-2028, which is the primary development control framework relevant to the study area. The baseline environment would also be strongly influenced by the CCC County Biodiversity Action Plan 2021 -2025 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 organisation would adequately reduce its organisational GHG emissions in line with national GHG emission reduction targets. The variety of actions for reducing operational GHG emissions and promoting energy efficiency would not be implemented. There will be less, direct policy support for the local authority transitioning its vehicle fleet to being electric or being powered by renewable fuels, which will decrease the likelihood of this being done successfully.

None of the specific climate related adaptation or flood 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 realised.

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

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

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



Overall, in the event the LACAP was not implemented, the net result would be that the likelihood of the local authority and local community realising 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 CCC'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. ⁶⁵
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.
	B4	To avoid or minimize significant impacts on semi-natural habitats, species, environmental features, or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation; and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.
Landscape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.
	AQN3	Avoid or minimise adverse noise impacts.
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.

⁶⁵ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.



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



6. DESCRIPTION AND EVALUATION OF LACAP ALTERNATIVES

6.1 Introduction

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

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

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

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

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

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

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

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

6.2 Goal of the Reasonable Alternative Evaluation Process in SEA

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

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



6.3 Approach to Developing Reasonable Alternatives

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

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

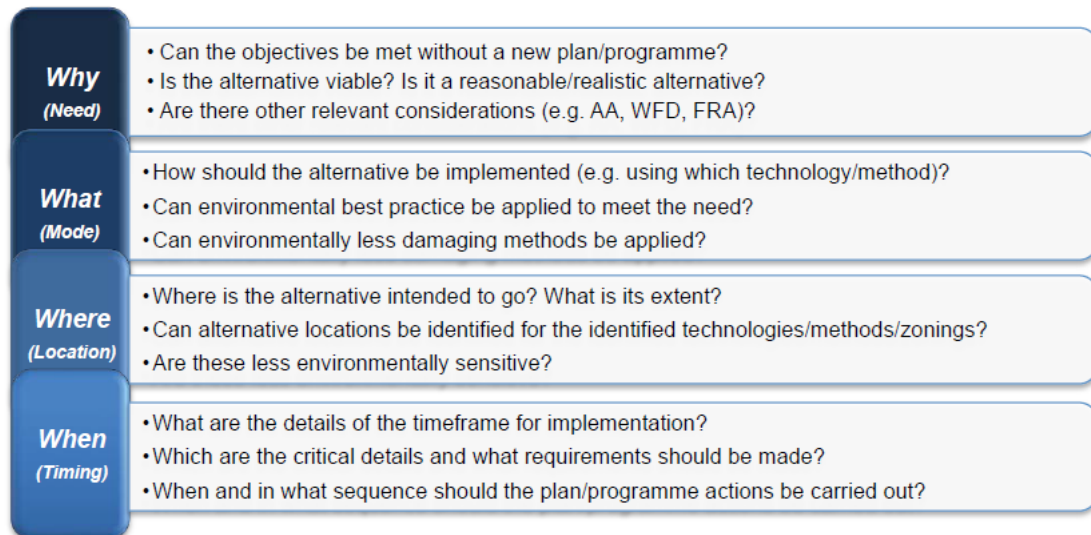


Figure 6-1: 'Why? What? Where? When?' Model for framing alternatives - Adapted from Figure 4.3 Developing and Assessing Alternatives in the Strategic Environmental Assessment Process (EPA, 2015).

6.4 Identification and Description of Reasonable Alternatives

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

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



Table 6-1: Reasonable Alternatives to the LACAP

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



6.5 Evaluating the Environmental Effects of Reasonable Alternatives

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

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

- Potential Positive Environmental Impact (indicated in the matrix by a '+').⁶⁶
- Potential Negative Environmental Impact (indicated in the matrix by a '-').⁶⁷
- 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').

⁶⁶ Potential Positive Environmental Impacts are defined as having the potential to support the achievement of an SEO.

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



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

Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current LACAP) (A3)	Commentary
Population & Human Health	PHH1	+/-	+/-	+/-	All alternatives considered will support the achievement of this SEO to some degree by promoting sustainable transportation and a modal shift that will have the benefit of reducing vehicle emissions. A3 will deliver these benefits more effectively however given the community engagement emphasis associated with this alternative. All alternatives will likely support active travel related development that may have some degree of adverse effect on population and/or human health through the generation of construction phase dust, noise or congestion in the absence of appropriate mitigation.
	PHH2	0	+	+	A2 and A3 are more holistic in nature and are likely to define specific nuanced and carefully balanced action that aligns with economic development objectives defined in the CDP and supports the achievement of this SEO.
Biodiversity, Flora & Fauna	B1	0	+	+	A2 and A3 will define specific action supporting the enhancement of biodiversity and the protection of biodiversity from climate change risks, including nature based solutions.
	B2	0	+	+	
	B3	0	+	+	A1 will strongly emphasise reducing GHG emissions associated with the Residential and Transport sectors. It is less likely this alternative would define a wide range of climate adaptation measures that would fully protect biodiversity from climate change risks.
	B4	0	+	+	
	B5	0	+	+	
Landscape & 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.
	W2	-	+/-	+/-	
	W3	-	+/-	+/-	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.
	W4	0	+	+	
	W5	-	+/-	+/-	



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



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
Climate Change	CF1	+	+	+	A1, A2 and A3 all support the achievement of climate change related SEOs to some extent. 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.
	CF2	+	+	+	
	CF3	+	+	+	
	CF4	+	+	+	
Inter-relationships	IR1	0	+	+	A3 is likely to support maintaining and enhancing human health and eco-system processes the most given its holistic and well balanced nature and community engagement emphasis.



6.6 Reasons for Choosing the Preferred LACAP

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

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

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

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

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

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



7. EVALUATION OF THE ENVIRONMENTAL EFFECTS OF LACAP IMPLEMENTATION

7.1 Introduction

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

7.2 Evaluation of the Environmental Effects of LACAP Implementation

A detailed evaluation of the potential effects of the Preferred LACAP on the baseline environment was carried out in accordance with the SEA Directive and best practice guidelines. An evaluation matrix was developed to facilitate the evaluation of the Preferred LACAP on SEOs relevant to each Environmental Component. An explanation of the approach and methodology for this detailed evaluation and completed evaluation matrices for each LACAP 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, cumulative⁶⁸, synergistic⁶⁹, 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.

⁶⁸ The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

⁶⁹ The addition of effects to create a total effect greater than the sum of the individual effects so that the nature of the final impact is different to the nature of the individual impact.



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

Key Environmental Effect	Main Relevant Environmental Component/s
The variety of climate actions defined in the plan, including organisational and community based actions are likely to generate multiple, slight positive effects on climate - having regard to the share of GHG emission reductions that can be supported via each individual action relative to national GHG emission reduction targets and requirements.	CC, AQN.
The plan is broadly supportive of different forms of community and local area based renewable energy development, which will have a positive effect on the climate environment.	CC, AQN.
In the absence of appropriate mitigation, community and local area renewable energy development that might be supported by plan actions, including any associated ancillary and linear infrastructure, has the potential to have a variety of unintended and potentially significant negative environmental effects however, including effects on local human receptors, biodiversity, landscape character and visual amenity, and the receiving noise environment.	PHH, BFF, L, AQN.
The plan supports the increased use of light-emitting diode (LED) lighting potentially across a wide geographic area. In absence of appropriate mitigation, the wide use of such lighting may lead to adverse effects on sensitive nocturnal species.	BFF.
Several plan actions are supportive of the upgrading/retrofitting of buildings to improve energy performance. In the absence of appropriate mitigation, such actions may have unintended and potentially significant negative effects on buildings that constitute protected structures, or on the context in which such protected structures of architectural or cultural heritage merit sit.	CH.
The plan supports the carrying out of a range of flood alleviation and resilience actions, including development and maintenance related actions. This range of actions will generate positive environmental effects on water quality, hydrology and biodiversity. The delivery of this action has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including human receptors, ecological receptors and cultural heritage assets.	W, BFF, PHH, CH.
The carrying out of the range flood 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.
The plan contains a set of actions designed to promote better resource management and the circular economy at organisational, community and local area level. This action, if implemented effectively, is likely to have some degree of environmental effect, as it will support proper waste management, reduce the risk of waste related environmental pollution or nuisance, and promote material circularity and resource efficiency, and consequently a reduction in material production related lifecycle GHG emissions.	MA, W, S, PHH, CC.



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



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.



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



Table 7-2: Inter-relationship between Environmental Components

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

Note: Green highlighting indicates a potential interrelationship/interaction



7.3.2 Inter-plan Cumulative Effects

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

- Conflicts between climate targets between various organisations - however, all higher order plans such as the CDP, RSES and the National Climate Action plan are aligned with the content of the LACAP. Adaptive language could provide the flexibility to allow localised augmentations to targets to increase or align with stakeholders within the lifetime of the LACAP.
- The LACAP provides for actions which support the delivery of development and infrastructure projects (in the form of flood 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, Framework for Alternative Fuel Infrastructure in Transport).
- Increased access to natural amenity sites could be facilitated by the combination of actions within the LACAP. Therefore, there could be cumulative effects related to this, particularly along waterways, in combination with other plans that support increased access to such sites.
- The LACAP supports a variety of actions relating to flood 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. 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.

7.4 Potential Transboundary Environmental Effects

Transboundary Environmental Effects, including marine based transboundary effects, were a fundamental consideration during the carrying out of the environmental assessment and form an intrinsic part of the



detailed environmental assessment presented in Appendix 3.2. In the absence of any mitigation, the identified effects, as presented in Section 7.3 and 7.4 have the potential to also impact Northern Irish receptors within the zone of influence of the local authority functional area.



8. MITIGATION MEASURES

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

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

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

8.1 Mitigation through consideration of alternatives

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

- **Alternative 1 (considered) - The Pareto Approach** - 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 LACAP

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

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

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

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

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

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

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



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

LACAP Action Reference	LACAP Action	Mitigation Measure
G20	Enhancement of emphasis on development of social housing on sites near town centres and local facilities	Attach the following text to the action: Ensure any supported development 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.
G21	Inform Industry, Business and Enterprise of applicable funding sources available to them to assist with GHG reduction or implementation of energy upgrades	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.
G23	To input to 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: with a focus on follow-up and protective/remedial action.
G26	Adapt a cloud technology first approach to reduce the volume of energy used by physical servers and ancillary infrastructure such as cooling systems	Attach the following text to the action: Steps will be taken to ensure the cloud provider chosen has sustainability- and carbon-goals that align with the overall objective of this plan.
G27	Replacement of technology in council chamber to facilitate hybrid meetings going forward	Attach the following text to the action: whilst ensuring WEEE generated as a result of this action is appropriately managed.
G28	Continue reduction of printers across organisation	Attach the following text to the action: whilst ensuring WEEE generated as a result of this action is appropriately managed.
BE5	Deliver the Cavan's Pathfinder Programme by 2025 and pursue other national and regional funding sources for retrofitting and improving energy efficiency and reducing emissions. Pursue additional similar funding programmes for further emission reduction works	Attach the following text to the action: whilst advocating and exerting influence to ensure that all retrofitting works will prioritise energy efficiencies and renewable energy generation (solar PV, geothermal and micro wind generation where feasible); having due regard to environmental sensitivities such as European sites and biodiversity.
BE6	Deliver the Public Lighting Energy Efficiency Project in Cavan as part of PLEEP Scheme to reduce GHG emissions and energy usage of Public Lighting.	Attach the following text to the action: while ensuring potential actions maintain/control or reduce existing lumen levels and spectral range to avoid effects on biodiversity.



LACAP Action Reference	LACAP Action	Mitigation Measure
BE7	Develop and implement a formalised retrofitting housing strategy for energy efficiency for our housing stock with an initial focus in Cavan Town as the DZ	Attach the following text to the action: having due regard for 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.
BE8	Ensure that all new council public buildings are built to Net Zero Standards	Attach the following text to the action: having due regard to the need to ensure renewable energy development forming part of this project will not have any significant negative environmental effect.
BE9	Use Gap to Target tool to inform decisions and continue Retrofitting council owned buildings to reduce emissions and improve energy efficiency)	Attach the following text to the action: having due regard for 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.
BE10	Facilitate and support the upgrade of existing vacant & derelict residential and commercial properties in Cavan Town and County through schemes such as Town Centre First.	Attach the following text to the action: having regard to environmental sensitivities such as local human receptors, European sites and biodiversity and the need to appropriately protect and conserve structures.
BE11	Investigate potential for application of solar PV on council owned car parks and investigate feasibility of installing on all appropriate Council/ Public buildings	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 impact on sensitive receptors.
BE12	Establish a program to prepare a full Building Energy Rating (BER) inventory for all publicly owned social housing within its functional area, GDPR permitting. Revise and update list annually	Attach the following text to the action: having due regard for 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.
BE13	Ensure water efficiency and water conservation in new LA buildings and housing by including water saving technologies in public housing and buildings, training plumbers and building contractors in water efficiency measures, and including water efficiency measure in Green Procurement	Attach the following text to the action: having due regard for 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.
BE14	Ensure all new build social housing by Cavan County Council met minimum A2 Building Energy Rating standard to reduce GHG emissions and Energy consumption.	Attach the following text to the action: having due regard to the need to ensure renewable energy development forming part of this project will not have any significant negative environmental effect.



LACAP Action Reference	LACAP Action	Mitigation Measure
BE15	Continue retrofitting and upgrading works of existing social housing units to BER B2 rating to reduce GHG emissions, energy consumption.	Attach the following text to the action: having regard to environmental sensitivities such as local human receptors, European sites and biodiversity and the need to appropriately protect and conserve structures.
BE17	Resolve local flooding issues utilising OPW and Department of Transport funding (Drainage programme, Climate Adaptation and Resilience Works, OPW Minor Works Scheme	Attach the following text to the action: having due regard to the protection of biodiversity and European sites and avoidance of habitat fragmentation.
TR1	Continue to roll-out Active Travel Infrastructure maximising available funding from the National Transport Authority (NTA). Priority projects include cycle lane from Cavan Hospital to Cavan Bus Station, Virginia footbridge, Pedestrian/Cyclist Safety Improvements Station Road, Cootehill.	Attach the following text to the action: having appropriate regard to environmental sensitivities such as European sites and biodiversity.
TR3	Progress the delivery of Greenway Infrastructure in line with the National Cycle Network (NCN) Priority projects at present include: 40km Greenway (Cavan to Ballyconnell, Cavan to Ulster Canal) and Cavan Town Urban Greenway Phase 2. Implement phase 2 of Cavan Town fully segregated greenway	Attach the following text to the action: having due regard to opportunities to enhance tourism, recreation and cultural heritage value associated with the route, and environmental sensitivities such as the receiving water environment, local air quality, biodiversity, European sites, and cultural heritage related sensitivities.
TR4	Work with and support the National Transport Authority, Rural Link, Bus Eireann and Cavan Transport Co-ordination Unit in the delivery and expansion of public transport initiatives the county. Including Routes and collection locations.	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.
TR5	Increase the number of safe routes to school schemes in county. Promotion of schemes and engagement with Boards of Management.	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.
TR7	Become a partner to the National Transport Authority administered Smarter Travel Programme and partake with associated initiatives such as the Smarter Travel Mark	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.



LACAP Action Reference	LACAP Action	Mitigation Measure
TR8	Develop an EV strategy for County Cavan & implement actions/recommendation as identified	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.
TR9	Develop a fleet management strategy ensuring alignment to the CAP	Attach the following text to the action: whilst ensuring energy/fuel used to power local authority vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for Electric Vehicles.
TR14	Purchase EV's as replacement fleet vehicles where suitable and available on the market in line with decarbonisation strategy	Attach the following text to the action: whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for Electric Vehicles.
TR15	Replacement of fuel type for HGV fleet with HVO's when technology and product becomes available, with alternatives such as HVO or biomethane.	Attach the following text to the action: whilst ensuring energy/fuel used to power local authority vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for HGVs.
TR20	Develop, adopt & implement Local Transport Plans for additional towns with an emphasis on the promotion of sustainable transport modes and modal shift.	Attach the following text to the action: whilst ensuring these plans are: - Designed to mitigate potential environmental and ecological impacts associated with supported active travel infrastructure. - Support the carrying out of environmental/biodiversity enhancement during the active travel development process.
TR21	Update cycling strategy for Cavan town and all of County Cavan and promotion of same. Identify deficiencies in the network for each town.	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.
TR22	Design and implement a transportation/mobility plan for Virginia and Bailieborough	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, whilst ensuring prioritising sustainable transport.
TR23	Finalise land use transportation plan for Cavan Town	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, whilst ensuring prioritising sustainable transport.
N3	Develop and implement a policy for the use of chemical pesticides and herbicides for areas managed by Cavan 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.
N4	Prepare guidelines for Invasive Alien Species Management	Attach the following text to the action: These guidelines 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.



LACAP Action Reference	LACAP Action	Mitigation Measure
N5	Develop Green Infrastructure Plan including a green infrastructure network for the County that incorporates ecology, climate change mitigation and adaptation, to increase climate resilience.	Attach the following text to the action: climate action co-benefits and environmental protection requirements.
N8	Assist with 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	Attach the following text to the action: having due regard for environmental sensitivities such as the receiving water environment, local air quality, biodiversity, European sites, and cultural heritage related sensitivities.
N9	Development and Implementation of a SUDS policy and continue the prioritisation of SUDS measures in local authority projects	Attach the following text to the action: ensuring the plan takes nature-based solutions/ protection of biodiversity and avoidance of habitat fragmentation into consideration.
N10	Prepare a roadside hedgerow management tool kit that informs staff on the value of hedgerows, particularly heritage hedgerows and outlines best practise in their management, having due regard to native hedgerows	Attach the following text to the action: having due regard to native hedgerows.
N11	Cavan County Council will seek to prioritise the delivery of Catchment Flood Risk Assessment and Management (CFRAM) 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.
N13	Pilot a biodiversity-inclusive design for a social housing estate with green roofs, green walls, wetland & pond SUDS, green car parking, nest boxes in facades, grasslands, and wildlife-friendly shrubs and trees in open space.	Attach the following text to the action: having appropriate regard to relevant planning and environmental protection criteria.
C1	Implement an awareness campaign to educate the public on climate change mitigation and adaptation measures including the circular economy, promoting biodiversity, food production in community gardens, water conservation and carbon reduction initiatives.	Attach the following text to the action: having due regard to environmental sensitivities such as protected species, European sites and biodiversity.



LACAP Action Reference	LACAP Action	Mitigation Measure
	Promote various funding streams and grants to assist homes, communities and businesses to implement positive climate actions.	
C9	Investigate and utilise funds that provide for cycle routes within 1.5km of all schools, community facilities, sports and youth clubs.	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.
S4	Run a pilot scheme to implement water fountains or water refilling stations in the parks within the DZ and measure usage.	Attach the following text to the action: having due regard to environmental sensitivities that may be affected by any built development such as the receiving water environment and local air quality.
S15	Promotion of diversification in food production through the economic and enterprise remit. Highlight positive benefits of Locally Grown Food.	Attach the following text to the action: having due regard to environmental sensitivities that may be affected by any built development such as the receiving water environment and local air quality.
S19	Provide technical supports to farming enterprises in the development of biomethane from Anaerobic Digestion, including guidance on planning and environmental protection requirements.	Attach the following text to the action: having due regard to environmental sensitivities that may be affected by any built development such as the receiving water environment and local air quality.
S20	Support and promote the Signpost Advisory Programme to support climate and sustainability actions on farms	Attach the following text to the action: having due regard to environmental sensitivities in the area such as European Sites, water quality, air quality, and biodiversity related sensitivities.
Cavan Town DZ		
DZ-BE1	Continue to retrofit all social housing and local authority buildings in the Cavan Town DZ to achieve a minimum Building Energy Rating of B2,	Attach the following text to the action: having due regard for 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.
DZ-BE2	Assess the feasibility and where feasible install rooftop solar PV on social housing and local authority property across the Cavan Town DZ	Attach the following text to the action: having due regard to local human receptors, protected species, biodiversity, European sites and the need to appropriately conserve protected structures.
DZ-BE4	Promote retrofit to Building Energy Rating B2 for private and commercial properties across the Cavan Town DZ	Attach the following text to the action: having due regard for 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.
DZ-BE6	Develop exemplar retrofitting projects to promote adaptive reuse of historic structures	Attach the following text to the action: having due regard to the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations, and the need to not negatively impinge on any protected species.



LACAP Action Reference	LACAP Action	Mitigation Measure
DZ-BE9	Utilise available funding to carry out flood protection works	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.
DZ-TR1	Undertake an Active Travel study to identify and prioritise the most effective measures	Attach the following text to the action: ensuring the study has appropriate regard to planning and environmental protection considerations.
DZ-TR5	Identify suitable locations for EV charging points at across the Cavan Town DZ	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.
DZ-TR7	Engage with the relevant authorities to support the electrification of Local Link	Attach the following text to the action: whilst advocating and exerting influence to support sustainability and environmental protection considerations being embedded into the project.
DZ-TR8	Promote, support & incentivize safe cycling/walking routes for schools within DZ area.	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.
DZ-TR9	Increase pedestrianized space in Cavan Town	Attach the following text to the action: having appropriate regard to environmental sensitivities such as traffic and transport constraints and aspects, the receiving water environment, biodiversity, European sites, local air quality and cultural heritage.
DZ-TR10	Implement phase two of the Cavan Town fully segregated greenway	Attach the following text to the action: whilst having appropriate regard to planning and environmental considerations.
DZ-TR11	Support a private service provider in carrying out a feasibility to assess the potential for a Park and Ride facility within the DZ.	Attach the following text to the action: having appropriate regard to planning and environmental protection considerations.
DZ-N1	Develop a green infrastructure masterplan for Cavan Town to coordinate planning for and enhancement of the natural environment, biodiversity and green areas	Attach the following text to the action: having due regard for environmental protection considerations and opportunities for climate action co-benefits.
DZ-N4	Support the creation of public and connected green spaces in Cavan Town to enhance health and wellbeing and biodiversity (e.g. pocket parks)	Attach the following text to the action: having due regard for planning and development policy and environmental protection considerations during the masterplanning and development process.
DZ-N5	Support green infrastructure and nature based solutions such as sustainable urban drainage systems to improve climate resilience	Attach the following text to the action: having due regard to environmental sensitivities including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.



LACAP Action Reference	LACAP Action	Mitigation Measure
DZ-N6	Promote rain-water harvesting, reuse of grey water and green roofs and walls.	Attach the following text to the action: having due regard for 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.
DZ-C7	Hold a one-stop-shop event to promote appropriate retrofitting of private buildings and increase community understanding of climate action	Reword the action to the following: Hold a one-stop-shop event to promote appropriate retrofitting of private buildings and increase community understanding of climate action
DZ-S4	Support the development of sustainable and circular economy infrastructure	Attach the following text to the action: whilst ensuring such infrastructure is appropriately located and designed and operates in accordance with the provisions of the Waste Management Act and in a manner that does not cause negative environmental impacts or localize nuisance.
DZ-S6	Partake in any such feasibility study of the potential for district heating for Cavan Town	Attach the following text to the action: ensuring this study has appropriate regard to planning and environmental protection considerations.
DZ-S9	To maximise the development potential of the Corranure Landbank as a renewable energy hub	Attach the following text to the action: ensuring environmental considerations are integrated into the design phase to promote win-win outcomes for aspects such as biodiversity.



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

<p>Promote climate action projects that support and maximise environmental co-benefits, such as biodiversity protection and enhancement; improved air, water or soil quality; or enhanced recreation, amenity and cultural heritage value, to ensure win-win benefits are gained.</p>
<p>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.</p>
<p>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 a significant negative effect on the receiving environment shall be supported.</p>
<p>Flood defence projects or related maintenance works supported by plan actions 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.</p>
<p>Ensure climate action related projects are carried out in a manner that promotes climate action-cultural heritage co-benefits, and do not result in unauthorised physical damage to cultural, archaeological or architectural features, or unauthorised or inappropriate alteration of the context of sensitive cultural heritage features.</p>
<p>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.</p>
<p>Promote climate action projects that support protected trees, hedgerows and other habitats such as wetlands, floodzones which contribute to green infrastructure.</p>
<p>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.</p>
<p>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.</p>
<p>Support opportunities to support peatland restoration, rehabilitation and maintenance while achieving climate targets through the implementation of the climate actions within the plan.</p>



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

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

8.4 Conclusion

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

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

All potential effects that may cause transboundary impacts will also be appropriately mitigated with the adoption of the defined mitigation. Mitigation measures have been adopted to ensure that the environmental effects of Plan Action are controlled at the source. Thus, it can be concluded that the LACAP will not have any likely, significant transboundary impacts.



9. POST DRAFT PLAN CONSULTATION REVISIONS

The LACAP has been approved by Cavan 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 modifications 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 modifications are presented in Appendix 4 and Appendix 5 respectively. The Plan modifications 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.

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

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

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

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

A stand-alone monitoring report on the significant environmental effects of the implementation of the LACAP will be prepared in advance of the plan review process. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of remedial action.



Table 9-1: 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 alignment between the Plan and the County Development Plan.	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, and DAERA where appropriate).
	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. Consent for development proposals supported by the plan only to be granted where development will be carried out in accordance with proper planning and sustainable development.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of likely significant environmental effects of development projects.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.	Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP. Condition of habitats impacted by climate change (Area km ² /length metres).	No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP. Ensure no habitats are impacted by the effects of climate change. Ensure no reduction in the number of geographic distribution of species as a result of climate change effects.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of compliance with the County Biodiversity Action Plan. Internal monitoring of likely significant environmental effects of development projects.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>Number and geographical distribution of Species or Species population trends impacted by climate change.</p> <p>Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p>	<p>No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p> <p>Consent for development proposals supported by the plan only to be granted where development complies with policy supporting biodiversity protection and enhancement.</p>	
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species ¹ .	Condition of European Sites and annexed species.	No adverse impacts on the condition of European Sites and Annexed habitats and species as a result of plan implementation.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with the NPWS and DAERA (where appropriate).</p> <p>Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive.</p> <p>Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the Birds Directive under Article 12.</p> <p>Review of NPWS and DAERA publications regarding the status of designated sites.</p>

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



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>No. of developments consented that have significant greenspace proposals.</p> <p>Improved biodiversity areas (Area km² /length metres).</p> <p>Compliance of development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p>	<p>Increase quantum of improved biodiversity areas.</p> <p>No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p> <p>Consent for development proposals supported by the plan only to be granted where development complies with policy supportive of biodiversity protection and enhancement.</p>	<p>Mapping of LR important habitats and species as part of the County Biodiversity Plan.</p>
Landscape, Seascape & Visual Amenity	L1	Avoid or, minimise impacts to statutory landscape designations, including seascape designations	<p>Status of Landscape Character Areas, the Seascape, 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, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects, or NI Areas of Outstanding Beauty.</p> <p>Number of areas in the local authority functional area designated for their landscape character or visual amenity.</p>	<p>All action and development proposals supported by the plan must comply with policy objectives relating to the protection of Landscape Character Areas, the Seascape, 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, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects, or NI Areas of Outstanding Beauty</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>No development supported by the plan should have a significant adverse visual impact on residential receptors or other sensitive visual receptors.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Review of future iterations of the Landscape Character Assessment.</p>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
				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.	
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).	<p>Percentage of features contained in the RMP (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan.</p> <p>Percentage of features contained in the RPS and NIAH (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan.</p>	<p>No features contained in the RMP (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan.</p> <p>No features contained in the RPS and NIAH (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media</p> <p>Review of Heritage Plan environmental effect monitoring</p>
Soils	S1	Avoid or minimise effects on mineral resources or soils.	Number of instances of significant adverse impacts on mineral resources or soils occurring, including the pollution, loss or degradation of mineral resources or soils, as a result of action and development supported by the plan.	No instances of significant adverse impacts on mineral resources or soils occurring as a result of action and development supported by the plan.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with Geological Survey of Ireland and review of published data on the soils environment.</p>
Land Use	LU1	Avoid or minimise effects on existing land use.	Number of instances of significant adverse impacts on existing land use as a result of plan implementation.	No instances of significant adverse impacts on existing land use as a result of plan implementation.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Review of Land Use, Land Use Change and Forestry related Greenhouse Gas emissions calculated in the Baseline Emission Inventory.</p>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
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
	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 and DAERA (where appropriate).
Water	W1	Maintain and/or improve, the quality and status of surface, transitional, bathing, and coastal 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 water bodies achieving High or Good Ecological Status as defined by the WFD within the	Number of Pollution Incidents detected due to poor bathing water quality results. Not to cause deterioration in the status of any water or affect the ability of any 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.	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 Review of DAERA water quality data.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>life-cycle of the Climate Action Plan.</p> <p>Status of transitional and coastal water bodies as reported by the EPA Water Monitoring Programme for the Water Framework Directive (WFD).</p> <p>Status of Northern Irish Waters, as reported by DAERA.</p>	<p>Implementation of the objectives of the second cycle of the national River Basin Management Plan.</p> <p>Increase in number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.</p>	
	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.	<p>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.</p> <p>Number of surface water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.</p>	<p>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.</p> <p>Increase in number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.</p>	Internal monitoring of likely significant environmental effects of development projects. Consultation with the EPA and DAERA.
	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 consent 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. Number of non-compliances with Water Supply (Water Quality) Regulations (Northern Ireland).	No non-compliances with Drinking Water Quality Standards defined in the European Union (Drinking Water) Regulations 2023. No non-compliances with Water Supply (Water Quality) Regulations (Northern Ireland)	EPA Drinking Water Quality Reports. Review of environmental quality data detailed in the EPA Maps Application. Review of DAERA Drinking Water Inspectorate reports on drinking water quality.
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 effects upon 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.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	MAI4	Promote sustainable waste management.	<p>Tonnes of hazardous waste received at Council Waste Management Facilities annually.</p> <p>Tonnes of W.E.E.E. waste received at Council Waste Management Facilities annually.</p> <p>Tonnes of Bulky waste received at Council Waste Management Facilities annually.</p> <p>Tonnes of garden waste received at Council Waste Management Facilities annually.</p>	<p>Increase waste recycling in the County.</p> <p>Reduce waste generation in the County.</p>	EPA Waste Statistics. Consultation with the EPA.
	MAI5	Promote sustainable water use and drainage management.	<p>Level of water use in the County.</p> <p>Compliance with Sustainable Drainage System (SuDS) related development management standards defined in the CDP.</p>	<p>Reduced water use in the county.</p> <p>All development (supported by the plan) must comply with SuDS related development management standards defined in the CDP.</p>	<p>CSO water consumption data.</p> <p>Internal monitoring of flood risk associated with development projects and development project compliance with relevant flood risk and management related development management standards.</p>
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.	Visitor trips to local authority functional area	Stable or increasing number of visitor trips to local authority functional area	Fáilte Ireland Data on Tourism Performance
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.	<p>Level of Greenhouse Gas (GHG) emissions in the County.</p> <p>Level of renewable energy infrastructure in the County.</p>	<p>Reduce GHG emissions associated with the Energy sector in the County.</p> <p>Increase the level of renewable energy infrastructure in the County.</p>	<p>EPA National Emission Inventory.</p> <p>Baseline Emission Inventory for the County.</p> <p>Megawatt hour (MWh) output from renewable energy infrastructure in the county.</p>
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.	Level of GHG emissions in the County	Reduce GHG emissions for all sectors in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	CF3	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.
	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 consent.	Increase the number of blue and green infrastructure measures included as part of development projects that have been granted consent.	Review of granted planning consents.



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 1

Relationship of the Plan with
other relevant Plans and
Programmes

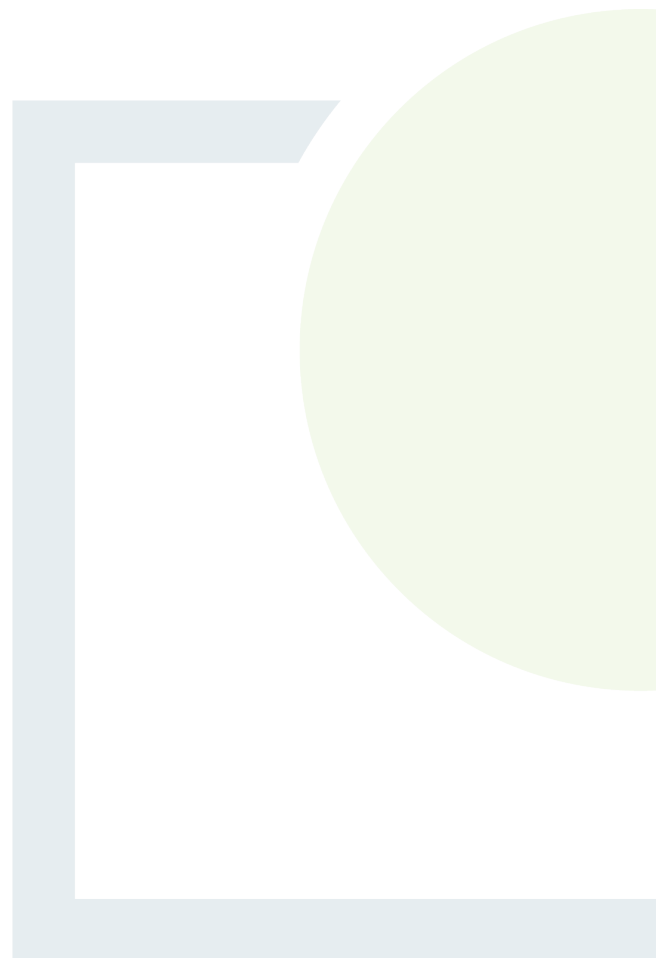




Table 10-1: SEA Monitoring Programme

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 alignment between the Plan and the County Development Plan.	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, and DAERA where appropriate).
	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. Consent for development proposals supported by the plan only to be granted where development will be carried out in accordance with proper planning and sustainable development.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of likely significant environmental effects of development projects.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.	Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP. Condition of habitats impacted by climate change (Area km ² /length metres).	No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the CDP. Ensure no habitats are impacted by the effects of climate change. Ensure no reduction in the number of geographic distribution of species as a result of climate change effects.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of compliance with the County Biodiversity Action Plan. Internal monitoring of likely significant environmental effects of development projects.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>Number and geographical distribution of Species or Species population trends impacted by climate change.</p> <p>Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p>	<p>No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p> <p>Consent for development proposals supported by the plan only to be granted where development complies with policy supporting biodiversity protection and enhancement.</p>	
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species ¹ .	Condition of European Sites and annexed species.	No adverse impacts on the condition of European Sites and Annexed habitats and species as a result of plan implementation.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with the NPWS and DAERA (where appropriate).</p> <p>Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive.</p> <p>Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the Birds Directive under Article 12.</p> <p>Review of NPWS and DAERA publications regarding the status of designated sites.</p>

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



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>No. of developments consented that have significant greenspace proposals.</p> <p>Improved biodiversity areas (Area km² /length metres).</p> <p>Compliance of development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p>	<p>Increase quantum of improved biodiversity areas.</p> <p>No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.</p> <p>Consent for development proposals supported by the plan only to be granted where development complies with policy supportive of biodiversity protection and enhancement.</p>	<p>Mapping of LR important habitats and species as part of the County Biodiversity Plan.</p>
Landscape, Seascape & Visual Amenity	L1	Avoid or, minimise impacts to statutory landscape designations, including seascape designations	<p>Status of Landscape Character Areas, the Seascape, 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, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects, or NI Areas of Outstanding Beauty.</p> <p>Number of areas in the local authority functional area designated for their landscape character or visual amenity.</p>	<p>All action and development proposals supported by the plan must comply with policy objectives relating to the protection of Landscape Character Areas, the Seascape, 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, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects, or NI Areas of Outstanding Beauty</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>No development supported by the plan should have a significant adverse visual impact on residential receptors or other sensitive visual receptors.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Review of future iterations of the Landscape Character Assessment.</p>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
				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.	
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).	<p>Percentage of features contained in the RMP (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan.</p> <p>Percentage of features contained in the RPS and NIAH (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan.</p>	<p>No features contained in the RMP (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan.</p> <p>No features contained in the RPS and NIAH (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan.</p>	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media</p> <p>Review of Heritage Plan environmental effect monitoring</p>
Soils	S1	Avoid or minimise effects on mineral resources or soils.	Number of instances of significant adverse impacts on mineral resources or soils occurring, including the pollution, loss or degradation of mineral resources or soils, as a result of action and development supported by the plan.	No instances of significant adverse impacts on mineral resources or soils occurring as a result of action and development supported by the plan.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Consultation with Geological Survey of Ireland and review of published data on the soils environment.</p>
Land Use	LU1	Avoid or minimise effects on existing land use.	Number of instances of significant adverse impacts on existing land use as a result of plan implementation.	No instances of significant adverse impacts on existing land use as a result of plan implementation.	<p>Internal monitoring of likely significant environmental effects of development projects.</p> <p>Review of Land Use, Land Use Change and Forestry related Greenhouse Gas emissions calculated in the Baseline Emission Inventory.</p>



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
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
	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 and DAERA (where appropriate).
Water	W1	Maintain and/or improve, the quality and status of surface, transitional, bathing, and coastal 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 water bodies achieving High or Good Ecological Status as defined by the WFD within the	Number of Pollution Incidents detected due to poor bathing water quality results. Not to cause deterioration in the status of any water or affect the ability of any 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.	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 Review of DAERA water quality data.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			<p>life-cycle of the Climate Action Plan.</p> <p>Status of transitional and coastal water bodies as reported by the EPA Water Monitoring Programme for the Water Framework Directive (WFD).</p> <p>Status of Northern Irish Waters, as reported by DAERA.</p>	<p>Implementation of the objectives of the second cycle of the national River Basin Management Plan.</p> <p>Increase in number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.</p>	
	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.	<p>EPA groundwater monitoring data and reports.</p> <p>Review of environmental quality data detailed in the EPA Maps Application</p>
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.	<p>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.</p> <p>Number of surface water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.</p>	<p>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.</p> <p>Increase in number of water bodies achieving High or Good Ecological Status as defined by the WFD within the life-cycle of the Climate Action Plan.</p>	Internal monitoring of likely significant environmental effects of development projects. Consultation with the EPA and DAERA.
	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 consent 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. Number of non-compliances with Water Supply (Water Quality) Regulations (Northern Ireland).	No non-compliances with Drinking Water Quality Standards defined in the European Union (Drinking Water) Regulations 2023. No non-compliances with Water Supply (Water Quality) Regulations (Northern Ireland)	EPA Drinking Water Quality Reports. Review of environmental quality data detailed in the EPA Maps Application. Review of DAERA Drinking Water Inspectorate reports on drinking water quality.
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 effects upon 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.



Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	MAI4	Promote sustainable waste management.	<p>Tonnes of hazardous waste received at Council Waste Management Facilities annually.</p> <p>Tonnes of W.E.E.E. waste received at Council Waste Management Facilities annually.</p> <p>Tonnes of Bulky waste received at Council Waste Management Facilities annually.</p> <p>Tonnes of garden waste received at Council Waste Management Facilities annually.</p>	<p>Increase waste recycling in the County.</p> <p>Reduce waste generation in the County.</p>	EPA Waste Statistics. Consultation with the EPA.
	MAI5	Promote sustainable water use and drainage management.	<p>Level of water use in the County.</p> <p>Compliance with Sustainable Drainage System (SuDS) related development management standards defined in the CDP.</p>	<p>Reduced water use in the county.</p> <p>All development (supported by the plan) must comply with SuDS related development management standards defined in the CDP.</p>	<p>CSO water consumption data.</p> <p>Internal monitoring of flood risk associated with development projects and development project compliance with relevant flood risk and management related development management standards.</p>
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.	Visitor trips to local authority functional area	Stable or increasing number of visitor trips to local authority functional area	Fáilte Ireland Data on Tourism Performance
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.	<p>Level of Greenhouse Gas (GHG) emissions in the County.</p> <p>Level of renewable energy infrastructure in the County.</p>	<p>Reduce GHG emissions associated with the Energy sector in the County.</p> <p>Increase the level of renewable energy infrastructure in the County.</p>	<p>EPA National Emission Inventory.</p> <p>Baseline Emission Inventory for the County.</p> <p>Megawatt hour (MWh) output from renewable energy infrastructure in the county.</p>
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.	Level of GHG emissions in the County	Reduce GHG emissions for all sectors in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County.



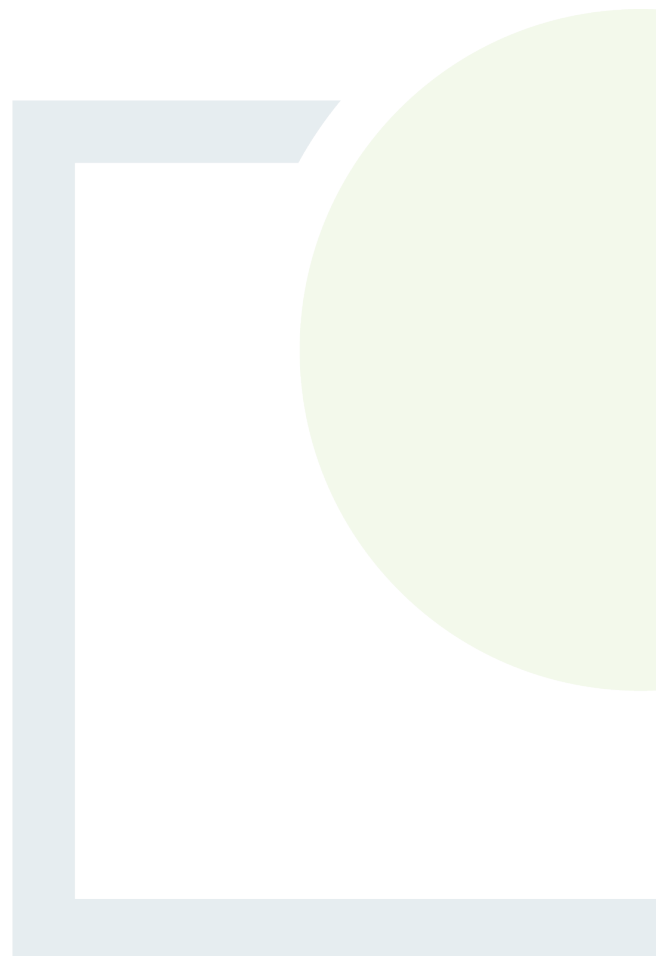
Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.	Level of GHG emissions in the County. Level of GHG emissions in the Decarbonising Zone. Net addition of 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.
	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 consent.	Increase the number of blue and green infrastructure measures included as part of development projects that have been granted consent.	Review of granted planning consents.



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 2

Scoping Consultation
Feedback





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Ms Bróna Keating
Climate Action Coordinator
Cavan County Council
Waste Management Section
Farnham Street
Cavan

30th August 2023

Our Ref: SCP230814.1

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

Dear Ms Keating,

We acknowledge your notice, dated 24th August 2023, in relation to the Cavan 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 Cavan County Council, in collaboration with other key stakeholders, over the five-year period from 2024 to 2029. This includes establishing climate action related strategic goals, high level objectives to support the delivery of these goals and also actions that are time-bound, measurable and focused on local level climate action.

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

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

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

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

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

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



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

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

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

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

Additionally, the relevant objectives and policy commitments of the National Planning Framework and the Northern and Western 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 Northern and Western Regional Spatial and Economic Strategy, where appropriate and relevant.

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

Cross-cutting issues

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

Integration of SEA and Plan

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

Monitoring, Implementation & Reporting

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

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



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

Consideration of other key Plans and Programmes

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

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

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

Data & Knowledge Gaps

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

Available Guidance & Resources

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

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



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

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

Environmental Sensitivity Mapping (ESM) Webtool

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

EPA SEA GIS Search and Reporting Webtool

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

EPA WFD Application

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

EPA AA GeoTool

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

Appendix II – Suggested high level plans to consider

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

Appendix III – Links to environmental guidance / reports

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

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

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

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

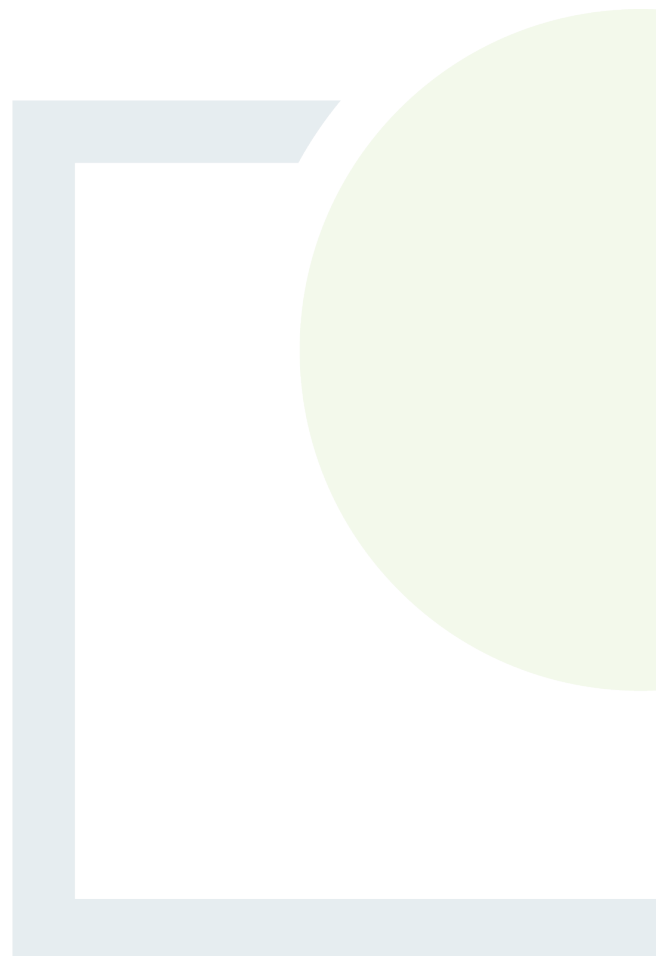
Changes in climate can encourage an increase in exotic pests and diseases including invasive species - which would have a negative impact on biodiversity if measures to promote resilience are not put in place. Equally, warmer and wetter climatic conditions encourage increased disease pressure in livestock,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



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 LACAP Implementation

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

A dedicated evaluation matrix has been prepared for each 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 categorised 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.

Transboundary environmental effects, including marine based transboundary effects, were a fundamental and intrinsic consideration during the carrying out of the environmental assessment.

For the purpose of the assessment below, the following should be made clear.

- The 'Biodiversity' environment as referenced in the assessment below is considered to be inclusive of the terrestrial, aquatic and marine biodiversity environments within the Republic of Ireland and Northern Ireland.
- The 'Landscape' environment as referenced in the assessment below is considered to include inland water scape and marine scape within the Republic of Ireland and Northern Ireland (Note the European Landscape Convention's (ELC) definition of 'Landscape' as being 'natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas').

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.

- The 'Water' environment as referenced in the assessment below is considered to be inclusive of surface waters, groundwater, transitional waters, coastal waters and the marine environment generally – both within the Republic of Ireland and Northern Ireland.'

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 minimize significant impacts on semi-natural habitats, species, environmental features, or other sustaining resources in designated national sites, non-designated locally important sites, and sites proposed for designation; and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	No net contribution to biodiversity losses or deterioration in response to the biodiversity emergency.
Landscape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.

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
	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.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) by 2030 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

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
G17	Update library educational stock with current climate action information where available. Continue to update material as necessary.	This action will support behavioural change and awareness aimed at sustainability and climate action at the core. The adoption of this action can potentially result in reduced energy consumption and prevent GHG emissions. The action is likely to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	+	0	0	0	0	0	0	0	0	+
G18	Review Local Authority estate competition with a view to incorporating where possible issues such as climate change	This action promotes climate action in the County. The degree of effect this action will have will be dependent on the number of competitions undertaken yearly.	0	0	0	0	0	0	0	0	0	0	0
G19	Promote newly refurbished and constructed council houses as best practice examples of energy conservation and the importance of the decarbonised zone both from local contractors and the public.	This action will promote climate-positive residential development within the County through improved energy efficiency. This action has the potential to lead to reduced GHG emissions from the residential sector.	0	0	0	-	0	0	+/-	-	0	0	+
G20	Enhancement of emphasis on development of social housing on sites near town centres and local facilities. Ensure any supported development 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..	This action will support the delivery/enhancement of a 10-minute town. 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. The action will support the development of shared spaces and walking and cycling infrastructure, landscaping, and drainage measures. In the absence of any mitigation, the construction and excavation works associated with this action 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),	0	-	0	-	0	0	+/-	-	-	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		biodiversity impacts, cultural heritage asset impacts and impacts on traffic and transport (through the temporary creation of traffic diversions and congestion).											
G21	Inform Industry, Business and Enterprise of applicable funding sources available to them to assist with GHG reduction or implementation of energy upgrades, 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.	<p>The implementation of the action will have no real environmental effect when considered in isolation. The action is generally supportive of retrofit and energy-upgrade projects in the business sector and may contribute toward achieving GHG emission reductions if successfully implemented.</p> <p>In the absence of any mitigation, works involved in the construction of additional 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.</p>	0	0	0	-	0	0	+/-	-	0	0	+
G22	Carry out an energy performance review on a quarterly basis. Review will include details of energy and GHG reduction progress from baselines	This is a monitoring action. Its implementation will have no real environmental effect when considered in isolation. The action will serve to assess GHG emissions.	0	0	0	0	0	0	0	0	0	0	+
G23	To input to 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 with a focus on follow-up and protective/remedial action.	Conducting a feasibility report will have no real environmental effect in and of itself. The environmental effects are dependent on the output. If determined possible, and remedial/protective measures are put in place, this could have positive effects on human health and water quality.	+	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
G29	Utilisation of M&R system to obtain information on organisations GHG emissions to ensure transparent, balanced and accurate reporting of decarbonisation progress to keep stakeholders informed.	This action will have no discernible environmental effects in and of itself. It will underpin sound management of progress on the decarbonisation actions contained within this plan and encourage the proper implementation thereof.	0	0	0	0	0	0	0	0	0	0	0
G30	Create and implement a climate action engagement programme within the organisation for all staff and Elected Members.	This is an engagement related action. The implementation of the action will have no real environmental effect when considered in isolation. The action will serve to promote organisational climate action awareness.	0	0	0	0	0	0	0	0	0	0	+
G31	Develop a climate action pack as part of induction process for all indoor and outdoor staff and EM's.	This action ensures the local authority's staff are trained on climate-action related issues as early as possible, which may lead to reductions in GHG emissions within the local authority.	0	0	0	0	0	0	0	0	0	0	+
G32	Provision of appropriate and ongoing training for Climate Action Committee Members. Ensure that all staff are aware of how extreme weather events affects the council in terms of provision of services and finances.	This action promotes the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
G33	Develop a collaborative cross departmental forum to educate and raise awareness amongst staff of climate change actions, initiatives and funding schemes available to assist with implementation. To include the use of exemplar projects and demonstration sites.	This educational action will support the effective delivery of climate action in the community and the local authority organisation. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community and within the local authority as an organisation.	0	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.

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
BE5	Deliver the Cavan's Pathfinder Programme by 2025 and pursue other national and regional funding sources for retrofitting and improving energy efficiency and reducing emissions. Pursue additional similar funding programmes for further emission reduction works.	<p>This action will support the reduction/offset of GHG emissions in the community. 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 and building 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> <p>In the absence of any mitigation, works involved in the construction of additional 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.</p>	0	-	0	0	-	0	-	-	0	0	+
BE6	Deliver the Public Lighting Energy Efficiency Project in Cavan as part of PLEEP Scheme to reduce GHG emissions and energy usage of Public Lighting.	This action will support the local authority in reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect in terms of GHG emissions however, the spectrum of light from LED sources has the potential to impact nocturnal species. Therefore there is also scope for there to be slight negative effects if unmitigated.	0	-	0	0	0	0	0	0	0	0	+
BE7	Develop and implement a formalised retrofitting housing strategy for energy efficiency for our housing stock with an initial focus in Cavan Town as the DZ.	This action will support the reduction/offset of GHG emissions in the community. 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	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		This action may support refurbishment or retrofitting of housing and building 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.											
BE8	Ensure that all new council public buildings are built to Net Zero Standards	<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>This action may support the development of renewable energy infrastructure. Such infrastructure has the potential to have negative environmental effects, including, potentially, glint and glare impacts, construction related environmental effects, noise impacts and impacts on biodiversity.</p>	0	-	0	0	0	0	+/-	-	0	0	+/-
BE9	Use Gap to Target tool to inform decisions and continue retrofitting council owned buildings to reduce emissions such as Electricity, Thermal and Transport and improve energy efficiency.	<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 refurbishment or retrofitting of building stock. There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negatively effect 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
BE10	Facilitate and support the upgrade of existing vacant & derelict residential and commercial properties in Cavan Town and County through schemes such as Town Centre First.	<p>This action has the potential to create a variety of positive environmental effects. In a climate context, this action has the potential to support the offset embodied GHG emissions associated with the construction of new residential development.</p> <p>This action has the potential to support the use of derelict structures which could result in significant negative effects if unmitigated. Any use should ensure correct restoration of derelict structures.</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. This action has the potential to have significant positive effects on population and land use.</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> <p>This action may support the carrying out of significant residential development, which may result in a range of slight to significant negative environmental effects in the absence of appropriate design or mitigation, including construction-related effects, or effects on traffic and transport, population and human health, land use, or biodiversity.</p>	+/-	-	0	-	0	-	+/-	0	0	-	0
BE11	Investigate potential for application of solar PV on council owned car parks and investigate feasibility of installing on all appropriate Council/ Public buildings.	<p>This research-based action may serve to promote renewable technologies, which could lead to lowered GHG emissions and improvements in air quality, locally.</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
BE12	Establish a program to prepare a full Building Energy Rating (BER) inventory for all publicly owned social housing within its functional area, GDPR permitting. Revise and update list annually.	<p>This action will support the reduction/offset of GHG emissions in the community. 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 and building 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	+
BE13	Ensure water efficiency and conservation measures are implemented in new LA buildings and housing, by including water saving technologies in public housing and buildings, training plumbers and building contractors in water efficiency measures, and including water efficiency measure in Green Procurement.	<p>This action will support the reduction/offset of GHG emissions in the community. 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 and building 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> <p>In the absence of any mitigation, works involved in the construction of additional 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.</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
BE24	Explore ways to minimise the expected increase in maintenance requirements and costs to road infrastructure from climate stress - Integrating climate change considerations at design stages - Explore the climate resilience of materials used in road construction and maintenance. Examine options to reduce road settlement due to severe weather events.	This is an assessment and financial action and it will have no real environmental effect in and of itself but may underpin actions that could lead to greater climate resilience.	0	0	0	0	0	0	0	0	0	0	0
BE25	Undertake a risk assessment of heritage, cultural and protected and archaeological structures to assess vulnerability to the impacts of climate change and to build resilience for these assets.	This action will support the protection of architectural/archaeological assets from climate change risks. It has the potential to have slight to significant, positive effects on cultural heritage and architectural assets.	0	0	0	+	0	0	0	0	0	0	+
BE26	Review Heritage Plan which incorporates the Biodiversity Plan. The actions within this plan will promote best practice in relation to the adverse impacts of climate change on historically important structures and the natural environment.	The implementation of this action is likely to generate some degree of positive effects for built, natural, and cultural heritage in the County.	0	+	0	+	0	0	+	0	0	0	+
TR1	Continue to roll-out Active Travel Infrastructure maximising available funding from the National Transport Authority (NTA). Priority projects include cycle lane from Cavan Hospital to Cavan Bus Station, Virginia footbridge, Pedestrian/Cyclist Safety Improvements Station Road, Cootehill.	This action will underpin and promote the carrying out of active travel related development, which has the potential to create a range of slight to significant positive environmental effects.	+	-	0	0	0	0	+/-	-	0	+	+/-

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
TR2	Continue to promote the use and development of initiatives to encourage sustainable mobility transport modes within the county. Engage with multimodal facilitators regarding suitability and implementation of such initiatives in appropriate towns.	This action has potential to improve the quality of sustainable/active travel networks in the local authorities functional area and promote the use of sustainable and healthy modes of transport - which help realize the potential positive environmental effects associated with sustainable/active travel.	+	0	0	0	0	0	+	0	0	0	+
TR3	Progress the delivery of Greenway Infrastructure in line with the National Cycle Network (NCN) Priority projects at present include: 40km Greenway (Cavan to Ballyconnell, Cavan to Ulster Canal) and Cavan Town Urban Greenway Phase 2. Implement phase 2 of Cavan Town fully segregated greenway	<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>	+	-	0	-	0	0	+/-	-	0	+	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The delivery of such green infrastructure has the potential to generate very significant positive tourism, recreation and cultural heritage related benefits/effects.											
TR4	Work with and support the National Transport Authority, Rural Link, Bus Eireann and Cavan Transport Co-ordination Unit in the delivery and expansion of public transport initiatives the county. Including Routes and collection locations.	<p>The delivery of an expanded, safe public transport network has the potential to promote the use of sustainable 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>In the absence of any mitigation, works involved in the construction of public transport infrastructure have the potential to generate a range of slight to profound significant environmental effects (depending the scale, extent and character of the development), including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.</p>	0	-	0	-	-	0	+/-	-	0	0	+
TR5	Increase the number of safe routes to school schemes in county. Promotion of schemes and engagement with Boards of Management.	<p>This action has the potential to encourage modal shift and the use of active travel networks. This action supports the development of additional cycling infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.</p>	+	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
		<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>											
TR6	Promote and encourage a modal shift by raising awareness of Active Travel Infrastructure throughout Cavan. Run one social media campaign per yr.	This promotional action will support the effective delivery of active travel action in the community. 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	+
TR7	Become a partner to the National Transport Authority administered Smarter Travel Programme and partake with associated initiatives such as the Smarter Travel Mark; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage etc.	This action has the potential to support a modal shift and reduction in vehicle related GHG emissions within the Local Authority.	+	0	0	0	0	0	+	0	0	0	+
TR8	Develop an EV strategy for County Cavan & implement actions/recommendation as identified	<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>	0	-	0	-	-	0	-	-	+	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
TR13	Prepare inventory of Local Authority fleet, including leased vehicles and status of same i.e. end of life.	Preparing an inventory will not have any real environmental effect in and of itself. The intended actions produced therefrom has the potential to support the reduction of vehicle related emissions in the Local Authority.	0	0	0	0	0	0	+	0	0	0	+
TR14	Purchase EV's as replacement fleet vehicles where suitable and available on the market in line with decarbonisation strategy	This action has the potential to support the reduction of vehicle related emissions in the County.	0	0	0	0	0	0	+	0	0	0	+
TR15	Replacement of fuel type for HGV fleet with alternatives such as HVO or biomethane when technology and product becomes available	This action has the potential to support the reduction of vehicle related emissions in the County.	0	0	0	0	0	0	+	0	0	0	+
TR16	To investigate the need for provision of pool vehicle(s) for Local Authority staff business use (site visits etc) and promote the cycle to work scheme to encourage the use of bicycles to travel to/from work. Encourage the use of car pooling/lift sharing	This action has the potential to support a modal shift and reduction in vehicle related GHG emissions within the Local Authority.	+	0	0	0	0	0	+	0	0	0	+
TR17	Undertake a staff travel audit to ascertain how staff are travelling to and from work and to understand what additional facilities or infrastructure may be required to support alternative sustainable travel means. Audit can also be used to evaluate annual mileage of LA grey fleet and the resulting carbon emissions	This action is administrative in nature and will have no environmental effect considered in isolation. 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	+
TR18	Where possible, the provision of showers and changing rooms to facilitate staff active travel via sustainable transport.	This action has the potential to support a modal shift and reduction in vehicle related GHG emissions within the Local Authority.	+	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
TR19	Promotion of virtual meetings over in-person meetings to reduce business travel of staff within and outside the County.	This action will likely promote a reduction in transport emissions associated with 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	+
TR20	Develop, adopt & implement Local Transport Plans for additional towns with an emphasis on the promotion of sustainable transport modes and modal shift whilst ensuring these plans are: - Designed to mitigate potential environmental and ecological impacts associated with supported active travel infrastructure. - Support the carrying out of environmental/biodiversity enhancement during the active travel development process.	This action will underpin and promote the carrying out of active travel related development, which has the potential to create a range of slight to significant positive environmental effects.	+	0	0	0	0	0	+	0	0	+	+
TR21	Update cycling strategy for Cavan town and all of County Cavan and promotion of same. Identify deficiencies in the network for each town.	This action has the potential to support a modal shift and reduction in vehicle related GHG emissions within the Local Authority.	+	0	0	0	0	0	+	0	0	0	+
TR22	Design and implement a transportation/mobility plan for Virginia and Bailieborough	This action has the potential to support a modal shift and reduction in vehicle related GHG emissions within the Local Authority.	+	0	0	0	0	0	+	0	0	0	+
TR23	Finalise land use transportation plan for Cavan Town	This action has the potential to support a modal shift and reduction in vehicle related GHG emissions within the Local Authority.	+	0	0	0	0	0	+	0	0	0	+

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Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
N5	Develop Green Infrastructure Plan including a green infrastructure network for the County that incorporates ecology, climate change mitigation and adaptation, to increase climate resilience, climate action co-benefits and environmental protection requirements.	<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
N6	Audit all local authority land, carry out ecological/habitat surveys and highlight areas at risk and those suitable for restoration and enhanced carbon storage, also identifying potential wildlife corridors for protection through statutory plan.	This action is likely to generate positive effects for biodiversity, flora, and fauna, as well as climate action.	0	+	0	0	0	0	0	0	0	0	+
N7	Conduct County wetland survey and implement recommendations in terms of conservation and restoration of wetlands.	This is an assessment action. The implementation of this action is likely to benefit biodiversity, water quality, soil, landscape and visual amenity, and climate change	0	+	+	0	+	0	0	+	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
N8	Assist with 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	Carrying out a feasibility study will not have any discernable environmental effect in and of itself. The effects of this action will be dependent on the outcome of the study. It may lead to enhanced waterbody protections and mitigation measures that may include significant construction works that could have negative effects for biodiversity, water quality, and landscape and visual amenity.											
N9	Development and Implementation of a SUDS policy and continue the prioritisation of SUDS measures in local authority projects.	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
N10	Prepare a roadside hedgerow management tool kit that informs staff on the value of hedgerows, particularly heritage hedgerows and outlines best practise in their management, having due regard to native hedgerows	The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna. This action will promote the protection and enhancement of hedgerow and has the potential to generate slight to significant effects for biodiversity in the county. Resulting in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions. It may also create flight corridors for bats and nesting habitats for birds.	0	+	0	0	0	0	0	0	0	0	+
N11	Cavan County Council will seek to prioritise the delivery of Catchment Flood Risk Assessment and Management (CFRAM) Programme identified flood schemes in the county and promote nature-based solutions and integral to these schemes.	The progression of this flood resilience related action has the potential to lead to significant development taking place. In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, including flora and fauna reliant on aquatic 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.	+/-	+/-	0	+	+	0	+/-	+/-	0	0	+/-

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<p>Flood resilience action has the potential to have positive environmental effects. The possible development of nature based solutions and SuDS as part of a flood risk management policy has the potential to have slight to significant, positive effects on biodiversity and water quality.</p> <p>The delivery of flood resilience action has the potential to reduce flood risk and prevent future 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> <p>The implementation of a flood management policy is likely to have slight to significant positive effects on the receiving soils environment - through the prevention of erosion. This may also have a beneficial impact on inter-related environmental components that could potentially be impacted by fluvial erosion.</p>											
N12	Develop a tree and woodland plan to increase tree cover on council owned land, using appropriate species to store carbon, support nature, improve soils and water quality, and aid in flood protection and urban design. Aim to increase areas of public land under forestry through schemes such as Forest Creation on public lands.	This action was added to the Plan subsequent to SEA public consultation. It was considered during the carrying out of SEA and AA Screening Assessments. It is in keeping with existing actions that were defined in the plan and does not introduce additional, likely significant effects not already identified, considered and mitigated against under the SEA.	0	0	0	0	0	0	0	0	0	0	0
N13	Pilot a biodiversity-inclusive design for a social housing estate with green roofs, green walls, wetland & pond SUDS, green car parking, nest boxes in facades, grasslands, and wildlife-friendly shrubs and trees in open space.	This action has the potential to have wide ranging slight to moderate positive effects on local biodiversity. Promoting biodiversity-inclusive design may result in positive effects for biodiversity, the environment and could provide an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	+	+/-	0	0	0	0	+	+	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
N22	Cavan County Council will seek to prioritise the delivery of Catchment Flood Risk Assessment and Management (CFRAM) Programme identified flood schemes in the county and promote nature-based solutions and integral to these schemes.	<p>The progression of this flood resilience related action has the potential to lead to significant development taking place.</p> <p>In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, including flora and fauna reliant on aquatic 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. The possible development of nature based solutions and SuDS as part of a flood risk management policy has the potential to have slight to significant, positive effects on biodiversity and water quality.</p> <p>The delivery of flood resilience action has the potential to reduce flood risk and prevent future 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> <p>The implementation of a flood management policy is likely to have slight to significant positive effects on the receiving soils environment - through the prevention of erosion. This may also have a beneficial impact on inter-related environmental components that could potentially be impacted by fluvial erosion.</p>	+/-	+/-	0	+	+	0	+/-	+/-	0	0	+/-

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Communities: Resilience & Just Transition

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
C1	Implement an awareness campaign to educate the public on climate change mitigation and adaptation measures including the circular economy, promoting biodiversity, food production in community gardens, water conservation and carbon reduction initiatives. Promote various funding streams and grants to assist homes, communities and businesses to implement positive climate actions.	<p>This action serves to promote energy efficiency and retrofitting. This will have no discernable environmental effect in and of itself but, if successful, may lead to slight reductions in GHG emissions in the County associated with energy usage.</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	+/-
C2	Develop sustainability guidelines for corporate events supported, facilitated and organised by Cavan County Council.	This action will support the promotion of environmental and climate-action awareness and has the potential to generate some degree of positive effects on sustainability and climate.	0	0	0	0	0	0	0	0	0	0	+
C3	Include 'Sustainability and Climate Change' scoring on relevant grant assessments to ensure that community groups/ stakeholders consider and incorporate Climate Mitigation and Adaptation in all their grant funded activities.	This action serves to incorporate climate considerations into all grant-funded activities which may result in a lowering of GHG emissions across a range of sectors.	0	0	0	0	0	0	0	0	0	0	+
C4	Support artists, organisations and communities to consider and adopt best practice in their work with regard to climate challenges such as water, environment and biodiversity.	This action supports climate action within the community. This may result in slight to moderate positive effects on climate, water, and biodiversity.	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
C5	Encourage and support tidy towns organisations, festivals and event organisers to incorporate climate action and sustainability into all events.	This promotional action serves to bring about some degree of positive environmental effect on climate change and GHG emission reduction as awareness and initiatives is brought into the community.	0	0	0	0	0	0	0	0	0	0	+
C6	Encourage community groups particularly Tidy Towns groups to consider climate change adaptation in their multi annual plans and programs to reduce climatic risks in their communities.	This promotional action serves to bring about some degree of positive environmental effect on climate change and GHG emission reduction as awareness and initiatives is brought into the community.	0	0	0	0	0	0	0	0	0	0	+
C7	Increase awareness on regenerative tourism to ensure that visitors have a positive impact on the county as a tourist destination. Ensure all tourism developments integrate sustainable tourism principles into their activities, plans and proposals.	This action serves to promote climate-friendly tourism within the county which may serve to have some positive effect on biodiversity, cultural heritage, and GHG emissions locally.	0	+	0	+	0	0	0	0	0	0	+
C8	Raise awareness of the impacts of climate change and ways for communities to increase response and resilience to these impacts.	This action will support the promotion of environmental and climate-action awareness and has the potential to generate some degree of positive effects on sustainability and climate.	0	0	0	0	0	0	0	0	0	0	+
C9	Investigate and utilise funds that provide for cycle routes within 1.5km of all schools, community facilities, sports and youth clubs.	This action has the potential to encourage modal shift and the use of active travel networks. This action supports the development of additional cycling infrastructure. In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust),	+	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
C15	Partner with Cavan Institute of Education to explore innovative Climate Action Adaptation and Mitigation research projects.	This is a study-based action. Depending on the outcome of the study, this action could potentially create some environmental benefits.	0	0	0	0	0	0	0	0	0	0	0
C16	Engage, promote and support Green Clubs programme amongst GAA clubs in the county.	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. 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.	0	+	0	0	0	0	0	0	0	0	+
C17	Liaise and collaborate with the CARO and the EPA on the implementation of the National Dialogue on Climate Action.	This action will support the promotion of environmental and climate-action awareness and has the potential to generate some degree of positive effects on sustainability and climate.	0	0	0	0	0	0	0	0	0	0	+
C18	Support the Green Schools and Heritage in Schools programme to promote biodiversity and climate issues to schools	This action will support the promotion of biodiversity and climate issues awareness and has the potential to generate some degree of positive effects on biodiversity and climate.	0	+	0	0	0	0	0	0	0	0	+
C19	Engage with schools and An Taisce and provide resources & funding to deliver green flags and achieve green schools status.	This action will support the promotion of environmental and climate-action awareness and has the potential to generate some degree of positive effects on sustainability and climate.	0	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
S1	Develop and Implement an annual environmental awareness campaign incorporating the objectives of the National Waste Management Plan for a Circular Economy	The development and implementation of this action is likely to promote effective waste management and waste/material circularity. Any measures that improve resource efficiency/circularity will broadly support the reduction of lifecycle GHG emissions associated with the production of materials and goods. This is likely to result in a positive environmental effect generally.	0	0	0	0	0	0	0	0	0	0	+
S2	Increase the number of solar bins across the County	This action has the potential to contribute to the creation of slight positive environmental effects on climate and material assets.	0	0	0	0	0	0	0	0	+	0	+
S3	Continued promotion of circular economy strategies for communities through engagement with community networks	The development and implementation of a waste management strategy, 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	0	+	0	+
S4	Run a pilot scheme to implement water fountains or water refilling stations in the parks within the DZ and measure usage.	This action has the potential to lead to slight positive environmental effects, through the reduction of plastic use and the generation of plastic waste requiring management.	+	0	0	0	0	0	0	0	+	0	+
S5	Regulate and enforce the National Enforcement Priorities (NEPs) which focus on delivering positive environmental outcomes for air quality, water quality and waste management. Ensure sustainable transport modes are used to travel to and from inspection sites, where feasible.	The action is likely to have a slight to significant positive environmental effect through a reduction in waste, water and air pollution.	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
S14	Coordinate and facilitate workshops and the preparation of guidance tools in conjunction with other stakeholders to assist farmers in taking up biodiversity opportunities at farm level, including information on food production, organic, sustainable and regenerative farming techniques or alternatives.	This promotional action will underpin and support the effective delivery of climate action in the agricultural sector by promoting and raising awareness and understanding of water conservation, sustainability, and 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	+
S15	Promotion of diversification in food production through the economic and enterprise remit. Highlight positive benefits of Locally Grown Food.	<p>This action has the potential to lead to slight to moderate positive effects on the soils environment, the water environment and biodiversity. The promotion of local food production may support the reduction of lifecycle GHG emissions associated with food sourced from afar.</p> <p>The carrying out of improper or unsustainable food production practices in a local context may result in negative environmental effects, including negative effects on water quality, the receiving environment and biodiversity.</p>	0	+/-	0	0	+/-	0	+	+/-	0	0	+
S16	Creation of a sustainable agriculture working group for Cavan in association with entities such as Teagasc, Dept of Agriculture and NPWS to support the agricultural sector with their GHG emissions reduction requirement	This promotional action will underpin and support the effective delivery of climate action in the agricultural sector by promoting and raising awareness and understanding of water conservation, sustainability, and 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	+
S17	Support the development of country and farmers' markets as key trading areas for the sale of local agricultural and craft produce and to support their role.	This action will have no real environmental effect in and of itself. The promotion of local food production may support the reduction of lifecycle GHG emissions associated with food sourced from afar.	0	0	0	0	0	0	+	0	0	0	0

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
S18	Support locally produced sustainable food products. Promote sustainable farm practices.	<p>This action has the potential to lead to slight to moderate positive effects on the soils environment, the water environment and biodiversity. The promotion of local food production may support the reduction of lifecycle GHG emissions associated with food sourced from afar.</p> <p>The carrying out of improper or unsustainable food production practices in a local context may result in negative environmental effects, including negative effects on water quality, the receiving environment and biodiversity.</p>	0	+/-	0	0	+/-	0	+	+/-	0	0	+
S19	Provide technical supports to farming enterprises in the development of biomethane from Anaerobic Digestion, including guidance on planning and environmental protection requirements.	<p>The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action has the potential to lead to the development of anaerobic digestion facilities which have the potential to create unintended localised, negative environmental impacts, , including odour effects or effects on traffic, biodiversity, European sites, landscape character and visual amenity, or soil, hydrological or water quality related effects.</p> <p>This action has the potential to lead to renewable energy development at these sites and GHG emissions reductions.</p>	0	-	-	0	-	0	+	-	0	0	+
S20	Support and promote the Signpost Advisory Programme to support climate and sustainability actions on farms	<p>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.</p>	+	+	0	0	+	0	+	+	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		This action could lead to the development of renewable energy development and building retrofits on farma within the LA region that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts.											
S21	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.	<p>This action has the potential to lead to slight to significant positive effects on important habitats and water quality, and slight positive effects on the climate environment.</p> <p>Limiting and regulating the use of chemical nitrogen fertiliser 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	+	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.

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ-G7	Establish a dedicated landing page for the publication of climate action updates, achievements, and developments within the DZ.	This is an organisational related action and will not have a real environmental effect when considered in isolation. It will support the delivery of the CAP vision and objectives generally.	0	0	0	0	0	0	0	0	0	0	+
DZ-BE1	Continue to retrofit all social housing and local authority buildings in the Cavan Town DZ to achieve a minimum Building Energy Rating of B2,	<p>This action will support the reduction/offset of GHG emissions in the community. 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 and building 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	+
DZ-BE2	Assess the feasibility and where feasible install rooftop solar PV on social housing and local authority property across the Cavan Town DZ	<p>This study action will have no real environmental effect when considered in isolation. This action will support the reduction of local authority organisational and 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. The installation of PV panels has the potential to result in negative glint and glare impacts on sensitive environmental receptors. There is also scope for there to be negative effects on cultural heritage 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
DZ-BE3	Implement sensor lighting in all common areas and corridors of suitable CCC buildings	This action will support the local authority in reducing its organizational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	+
DZ-BE4	Promote retrofit to Building Energy Rating B2 for private and commercial properties across the Cavan Town DZ	<p>This is a promotional action, and it will have no real environmental effect in and of itself. However, this action can support the reduction/offset of GHG emissions in the community. 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 and building 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	+
DZ-BE5	Undertake a study to assess the vacancy rate of residential dwellings in the DZ	This is an assessment action. Its implementation will have no real environmental effect when considered in isolation. The action will serve to assess GHG emissions.	0	0	0	0	0	0	0	0	0	0	+
DZ-BE6	Develop exemplar retrofitting projects to promote adaptive reuse of historic structures	<p>This action will support the reduction of GHG emissions associated with heritage assets, in line with climate policy and legislation and emission reduction targets.</p> <p>This action has the potential to support the use of historic structures and traditional buildings which could result in significant 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
		Any use should ensure correct restoration of historic structures and traditional buildings. Such restoration can significantly increase the amenity and heritage value associated with such buildings. 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. 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.											
DZ-BE7	Identify, incentivise, and support the provision of co-working facilities within the DZ	This action will not have any real environmental effect in isolation. It will promote energy efficiency in the commercial sector to some degree.	0	0	0	0	0	0	0	0	0	0	+
DZ-BE8	Prioritise completion of CFRAMS identified flood schemes within the DZ to ensure all current and future flood risks are identified	This action is administrative in nature and will have no real environmental effect when considered in isolation. The action will promote the effective delivery of the flood resilience related objectives of the plan.	0	0	0	0	0	0	0	0	0	0	+
DZ-BE9	Utilise available funding to carry out flood protection works	<p>The progression of flood protection 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 protection action has the potential to have positive environmental effects also. The possible development of nature-based solutions and SuDS as part of a flood protection 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>	+/-	+/-	0	+	0	0	+/-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The delivery of flood protection 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.											
DZ-TR1	Undertake an Active Travel study to identify and prioritise the most effective measures	<p>This is a study based action. Depending on the outcome of the study, this action could potentially lead to promotion of modal shift which could have a positive effect on the climate and local air quality environments.</p> <p>In the absence of any mitigation, development that this study could lead onto extensive construction works, which could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, flora and fauna; the receiving air environment (due to the generation of construction dust), the receiving noise environment (due to the generation of construction phase noise), and the receiving human environment.</p>	0	-	0	0	0	0	+/-	-	0	0	+
DZ-TR2	Examine and identify active travel funding streams	This is an assessment/financial action. Its implementation will have no real environmental effect when considered in isolation. The action will serve to promote modal shift.	0	0	0	0	0	0	0	0	0	0	+
DZ-TR3	Assess the feasibility of a bike rental / electric bike scheme in the Cavan Town DZ.	This is an assessment action. Depending on the outcome of the assessment, this action could potentially promote modal shift, which could have a positive effect on the climate and local air quality environments.	+	-	0	0	0	0	+/-	-	0	0	+
DZ-TR4	Discuss potential for a feasibility study of free public transport options with public transport representatives	This is an assessment action. Depending on the outcome of the assessment, this action could potentially promote modal shift, which could have a positive effect on the climate and local air quality environments.	0	0	0	0	0	0	+	0	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ-TR5	Identify suitable locations for EV charging points at across the Cavan Town DZ	<p>This action has the potential to increase the uptake in Electric Vehicles and will support a modal shift and reduction in vehicle related GHG emissions.</p> <p>The expansion of the EV charging network will lead to the development of multiple charging points and ancillary electrical infrastructure including grid connection routes 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	0	+
DZ-TR6	Work with businesses to promote climate friendly transport, e.g., last kilometre delivery	This action has the potential to support the reduction of vehicle related emissions in the County.	0	0	0	0	0	0	+	0	0	0	+
DZ-TR7	Engage with the relevant authorities to support the electrification of Local Link	This opportunity will lead to the development of an EV charging network with multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the DZ area.	0	-	0	-	-	0	+/-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<p>In the absence of any mitigation, works involved in the construction of additional 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 a 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 opportunity relative to national GHG emission reduction targets and requirements.</p>											
DZ-TR8	Promote, support & incentivise safe cycling/walking routes for schools within DZ area.	<p>This action has the potential to encourage modal shift and the use of active travel networks. This action supports the development of additional cycling infrastructure.</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) and biodiversity impacts.</p> <p>This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.</p> <p>The action has the potential to have a positive impact on population and human health by reducing traffic risk at schools.</p>	+	-	0	0	0	0	+/-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ-TR9	Increase pedestrianised space in Cavan Town	<p>This action will promote the development of safe sustainable and active travel networks. This action has the potential to encourage modal shift and the use of active travel modes and networks. It will help fully realise the potential positive environmental effects associated with sustainable/active travel.</p> <p>In the absence of any mitigation, works involved in the reallocation/pedestrianising 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), biodiversity impacts and traffic and transport impacts (through the temporary creation of traffic diversions and congestion).</p>	+	+/-	0	0	0	0	+/-	-	0	0	+
DZ-TR10	Implement phase two of the Cavan Town fully segregated greenway	<p>This action will promote the development of green infrastructure. The 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	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		<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>											
DZ-N2	Carry out a habitat survey of local authority land within the DZ to identify areas at risk and those suitable for restoration works	This survey action has the potential to support biodiversity enhancement action that could lead to biodiversity and visual amenity benefits.	+	+	+	0	+	+	+	+	0	+	+
DZ-N3	Promote biodiversity gain and carbon sequestration in Cavan Town through strategic planting of native species for all new developments	This action has the potential to have slight to 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	+	+
DZ-N4	Support the creation of public and connected green spaces in Cavan Town to enhance health and wellbeing and biodiversity (e.g. pocket parks)	<p>This action has the potential to have positive environmental effects on landscape and visual amenity, the soils environment, biodiversity and population and human health by providing safe public space for outdoor recreation.</p> <p>The action may also support an additional degree of carbon sequestration and have a positive impact on local air quality.</p> <p>Inappropriate design or planning, or a lack of appropriate environmental mitigation may result in unintended construction or operational phase impacts on sensitive environmental receptors, such as the receiving biodiversity, human, noise, traffic or water environment.</p>	+	+	+	0	0	+	+	0	0	+	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ-N5	Support green infrastructure and nature based solutions such as sustainable urban drainage systems to improve climate resilience	<p>The use of nature based solutions and sustainable urban drainage systems has the potential to lead to significant development taking place, including development at and in the vicinity of water bodies.</p> <p>In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; 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 development of nature based solutions and sustainable urban drainage systems as part of a climate/flood resilience 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	+/-
DZ-N6	Promote rain-water harvesting, reuse of grey water and green roofs and walls.	The promotion of water harvesting and grey water reuse will support a slight to moderate reduction in water use at local authority owned buildings and housing.	0	-	0	-	0	0	+/-	+/-	+	0	+/-

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ-C2	Develop a range of age-appropriate informational supports to provide citizens with knowledge to understand and implement the transition in their own lives	This promotional/engagement action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the plan vision in the community.	0	0	0	0	0	0	0	0	0	0	+
DZ-C3	Identify, train, and resource 'Sustainability Champions' who can act as ambassador businesses for their sectors to encourage other companies within the DZ	This promotional/engagement action will support the effective delivery of climate action in the local businesses. The adoption of this action will support the full realisation of the plan vision in the community.	0	0	0	0	0	0	0	0	0	0	+
DZ-C4	Facilitate the distribution of Energy Saving Kits to the public through local libraries	This promotional action will not have any real environmental effect in isolation. It will promote energy use awareness and energy efficiency in the Residential sector to some degree.	0	0	0	0	0	0	0	0	0	0	+
DZ-C5	Support the work of the Sustainable Energy Community within Cavan Town	This promotional/engagement action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the plan vision in the community.	0	0	0	0	0	0	0	0	0	0	+
DZ-C6	Use Digital Technology to highlight issues such as air pollution and promote awareness through schools and intergenerational projects	This promotional/engagement action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the plan vision in the community.	0	0	0	0	0	0	0	0	0	0	+
DZ-C7	Hold a one-stop-shop event to promote appropriate retrofitting of private buildings and increase community understanding of climate action	This is a promotional action and it will have no real environmental effect in and of itself. However, this action can support the reduction/offset of GHG emissions in the community. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. This action may support refurbishment or retrofitting of housing and building stock.	0	-	0	-	0	0	-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		There is the potential for light and air pollution during retrofitting works. 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.											
DZ-S1	Ensure CCC procure 100% renewable electricity where possible	This action is unlikely to have any discernible environmental effect.	0	0	0	0	0	0	0	0	0	0	+
DZ-S2	Ensure CCC procurement is fully aligned with green public procurement and circular economy (e.g., no single use products)	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	0	0	+
DZ-S3	Develop informational supports to promote the concept of share, reuse and repair amongst communities	The promotion of 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	0	+	0	+
DZ-S4	Support the development of sustainable and circular economy infrastructure	This action will underpin and support the effective delivery of sustainability and circular economy related initiatives. Supported waste management infrastructure could lead to the creation of unintended negative environmental effects, including slight to significant traffic, noise, odour or nuisance related effects, if inappropriately designed or located, or in the absence of appropriate environmental mitigation.	0	-	0	-	-	0	+/-	-	0	0	+

Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ-S5	Install solar compactor bins with smart collection facility	This action has the potential to contribute to the creation of slight positive environmental effects on climate and material assets.	0	0	0	0	0	0	0	0	+	0	+
DZ-S6	Partake in any such feasibility study of the potential for district heating for Cavan Town	<p>This is a study related action and will have no real environmental effect when considered in isolation. Depending on the outcome of this study, it has the potential to support the delivery of GHG emission reductions and energy efficiency in a local area.</p> <p>In the absence of any mitigation, development that this could action could lead to, which will include extensive pipe laying works, could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, flora and fauna; the receiving air environment (due to the generation of construction dust), the receiving noise environment (due to the generation of construction phase noise), and the receiving human environment.</p>	-	0	0	0	0	0	+/-	0	0	0	+
DZ-S7	Encourage waste service providers to provide for the rollout of organic waste bins across household, commercial and public bin collection.	This action is likely to support proper management of waste and reduce the risk of improper disposal of waste - which may lead to the occurrence of environmental pollution.	0	0	0	0	0	0	0	0	+	0	+
DZ-S8	Engage with local industrial sector regarding the impact on air quality from industrial emissions	This action will support behavioural change within the local industries with some degree of overall environmental benefit. The adoption of this action can potentially have a slight positive effect local air quality and on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	+	+

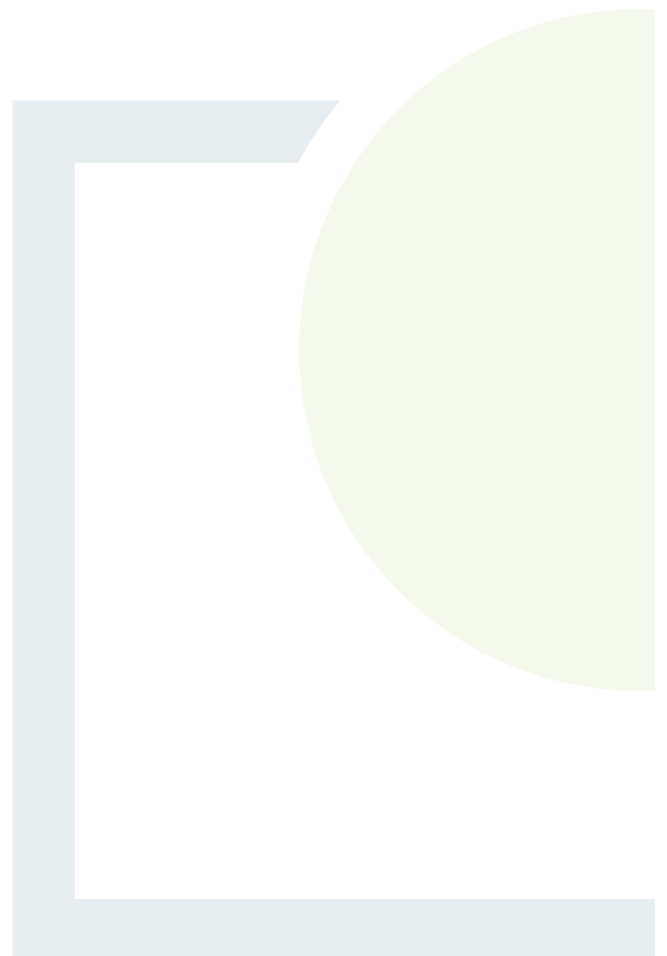
Action Ref.	LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
DZ-S9	To maximise the development potential of the Corranure Landbank as a renewable energy hub	<p>This action will support the reduction of GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a moderately 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 will support the development of renewable energy technologies at the site, which could lead to a variety of slight to potentially significant localised environmental impacts, including impacts on biodiversity, landscape character and visual amenity, the receiving noise environment; or construction-related effects.</p>	0	-	-	0	-	0	+/-	-	0	0	+



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 4

SEA Screening Report





CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE &
PLANNING

STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING REPORT

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

Prepared for:
Cavan County Council



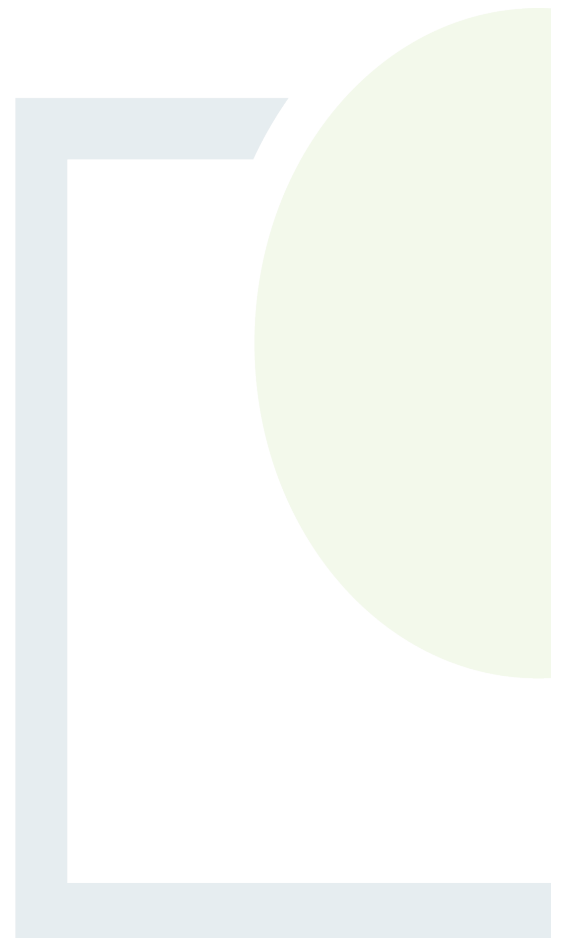
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SEA Screening Report For Modifications To The Cavan County Council Local Authority Climate Action Plan 2024 -2029

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

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1. INTRODUCTION

1.1 Background

This is the Strategic Environmental Assessment (SEA) Screening Report for Modifications to the Cavan County Council (CCC) 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 CCC. These submissions were taken into consideration prior to finalisation of the LACAP. CCC have prepared a Chief Executive Report on the submissions received. This document details the submissions received, CCC responses to the submissions, and Plan Action Modifications arising following consideration of the submissions.

1.3 Purpose of this Assessment

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

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

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



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

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

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



2. SEA SCREENING METHODOLOGY

2.1 Overview of the SEA Process

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

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

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

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

The SEA process comprises the following steps:

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

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

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

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

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



2.2 Overview of the SEA Screening Process

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

The first stage in determining whether a P/P requires SEA is the carrying out of a 'Pre-screening Check' (also known as a 'Stage 1 Applicability'). This allows rapid screening-out of P/P that are clearly not going to have any environmental impact and screening-in of those that do require SEA. The second stage in determining whether a P/P requires SEA is known as 'Stage 2 Screening.' The purpose of this stage is to determine whether a P/P is likely to have significant effects on the environment and whether SEA must be carried out in conjunction with a P/P. The application of environmental significance criteria is important in determining whether an SEA is required. Annex II of Directive 2001/42/EC sets out the 'statutory' criteria that should be addressed when undertaking this stage. This process is typically undertaken following an 8-step approach Figure 2-1.

The first environmental significance criterion relates to the characteristics of the P/P, having regard to: the degree to which the P/P sets out a framework for other projects and activities; the influence of the P/P on other projects, plans or activities; the role of the plan for integrating environmental considerations to promote sustainable development; environmental issues of relevance to the P/P and the relevance of the P/P for the implementation of EU legislation on the environment.

The second environmental significance criterion refers to the characteristics of the effects and area likely to be affected, having regard to; the probability, duration, frequency and reversibility of the effects; the cumulative nature of the effects; the transboundary nature of the effects; the value and vulnerability of the area likely to be affected due to special natural characteristics or cultural heritage, exceeded environmental quality standards or limit values or intensive use; the effects on areas or landscapes which have a recognised national, European or international protection status.



Figure 2-1: SEA Screening steps as per the EPAs Good Practice Guidance on SEA Screening



2.3 Legislative Context

The screening stage of SEA is primarily addressed through Article 2 and Article 3 of the SEA Directive and Annex II which sets out the considerations in relation to determining significant environmental effects.

Article 2(a) of the SEA Directive establishes two cumulative conditions which P/P must satisfy in order for the further elements of the SEA Directive to be applicable to them:

- They must have been prepared and/or adopted by an authority at national, regional or local level or prepared by an authority for adoption, through a legislative procedure, by a parliament or government; and
- They must be required by legislative, regulatory or administrative provisions.

If these conditions are not satisfied, the measure is not regarded as a P/P which comes within the scope of the SEA Directive.

Once a P/P has been determined to be within the scope of the SEA Directive, Article 3 sets out the criteria for determining which P/P require environmental assessment. Again, several conditions must be met. A P/P must (a) belong to the list of sectors and (b) set the framework for future development consent of projects listed in Annexes I and II to the EIA Directive, or (c) require an Appropriate Assessment under the EU Habitats Directive (92/43/EEC).

Annex II of the SEA Directive presents the criteria for determining the likely significant effects referred to in Article 3(5) of the Directive. The significance of effects is determined with reference to the type and nature of the P/P, its position in the planning hierarchy and its influence on other P/P. It also has regard to the nature of the effects and the sensitivity of the receiving environment as well as the magnitude and spatial extent of the effects. Cumulative and transboundary issues must also be considered.

The SEA Directive is transposed into Irish legislation by the following:

- European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations (S.I. 435/2004)
- Planning and Development (Strategic Environmental Assessment) Regulations (S.I. 436/2004). Both pieces of legislation were amended in 2011 through the following amendment regulations:
- European Communities (Environmental Assessment of Certain Plans and Programmes) Amendment Regulations (S.I. 200/2011)
- Planning and Development (Strategic Environmental Assessment) Amendment Regulations (S.I. 01/2011).

The criteria defined in Annex II of the SEA Directive has been transposed into national legislation via Schedule 1 of S.I. 435/2004.

This SEA Screening, which considers the modifications to the CCC Draft LACAP, has been carried out in accordance with above legislation.



2.4 Relevant SEA Guidance

This SEA Screening has been carried out in accordance with and having appropriate regard to the following guidance documents:

- Good Practice Guidance on SEA Screening (EPA, 2021).
- Synthesis Report on Developing A Strategic Environmental Assessment (SEA) Methodologies For Plans And Programmes In Ireland (EPA, 2013).
- Synthesis Report on Developing A Strategic Environmental Assessment (Sea) Methodologies for Plans and Programmes in Ireland (EPA, 2003).
- Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities
- Implementation of Directive 2001/43 on the Assessment of the Effects of Certain Plans and Programmes on the Environment (European Commission, ND).

2.5 Appropriate Assessment and relationship to SEA Screening

The EU Habitats Directive (92/43/EEC) requires an 'Appropriate Assessment' (AA) to be carried out where a plan or project is likely to have a significant impact on a European site. European sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

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

Article 3(c) of the SEA Directive requires that an SEA is carried out on a P/P wherever such a P/P requires an AA under the EU Habitats Directive (92/43/EEC).

An AA Screening Report has also been prepared for the Plan Action modifications in this case in accordance with Article 6(3) of the EU Habitats Directive (92/43/EEC). The Report concludes the following:

It is concluded in view of best scientific knowledge and in view of conservation objectives, that the Modifications to the Draft LACAP will not give rise to any likely significant effects on designated European sites, alone or in combination with other plans or projects. Consequently, a Stage 2 AA is not required for the Plan modifications.

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



3. MODIFICATIONS TO THE LOCAL AUTHORITY CLIMATE ACTION PLAN

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

Table 3-1: Summary of Plan Action Modifications

Action	Summary of Modification
G5	The following Action has been added to the Plan: “Assist with the 2024 mid term review of the Cavan Cuilcagh Lakelands Geo Park Development Plan to ensure continuity of climate focused objectives with Climate Action Plan.”
TR15	This action has been amended to add the following text: "with alternatives such as HVO or biomethane"
N10	The Action has been amended to add the text "particularly heritage hedgerows" as follows: “Prepare a roadside hedgerow management tool kit that informs staff on the value of hedgerows, particularly heritage hedgerows and outlines best practise in their management, having due regard to native hedgerows”
N12	The following new Action has been added to the Plan: “Develop a tree and woodland plan to increase tree cover on council owned land, using appropriate species to store carbon, support nature, improve soils and water quality, and aid in flood protection and urban design. Aim to increase areas of public land under forestry through schemes such as Forest Creation on public lands.”
N16	The following text has been added to the Action: “Highlight the importance of cultivation and propagation of disease resistant plants e.g. plants resistant to diseases such as ash dieback”
N17	The following new Action has been added to the Plan: “Promote not-for-profit tree planting programmes for targeted ecological improvements, ground stabilisation as a means of climate change mitigation, and carbon sequestration over the lifetime of the planted species”
N21	The following new action has been added to the Plan: “Promote public education to increase awareness of the importance of bogs as both hydrological and carbon sinks, explaining their ability to reduce the effects of surface water run off during rainfall events and their ability to provide a subsequent slow release of water to the receiving environment. Awareness should be increased of the benefits of rewetting bogs and how these actions can be taken by landowners”
C1	The action has been amended to include the following text: “Food production in community gardens”



3.1 SEA Screening Assessment of Plan Modifications

The following has been considered when carrying out the SEA Screening Assessment of Plan Action modifications to the Draft LACAP.

- The likely significant effect on the environment of implementing the Draft LACAP.
- The likely significant effect on the environment of implementing the Plan Action modifications.
- The Strategic Environmental Objectives (SEOs) defined in Section 5 of the Draft SEA Environmental Report for the CCC Draft LACAP that the Plan modifications must accord with and support.
- The mitigation measures defined in Section 8 of Draft SEA Environmental Report and Section 5 of the Draft NIR.

Therefore, the Plan Action modifications must be considered in relation to the current Draft LACAP which has already been subject to SEA and AA considerations. All Plan Action modifications are considered therefore in the context of potential additional sources for impacts/effects which were not previously considered.



4. STRATEGIC ENVIRONMENTAL ASSESSMENT SCREENING

This section of the report documents the SEA Screening undertaken.

Stage 1 Applicability Analysis was undertaken initially. This analysis is detailed in Section 4.1 of this report (Table 4-1 and Table 4-2).

Stage 2 Screening Analysis was then undertaken. This analysis is detailed in Section 4.2 of this report (Table 4-3, Table 4-4 and Table 4-5).

4.1 Stage 1 - SEA Applicability Analysis

Table 4-1: SEA Applicability Analysis

SEA Applicability Analysis	
Status of Plan/Programme Maker	
Is the P/P prepared and/or adopted by an authority at national, regional or local level or prepared by an authority for adoption through a legislative procedure by Parliament or Government?	The LACAP has been prepared by a local authority in accordance with Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021
Is the P/P required by legislative, regulatory, or administrative provisions?	The LACAP is required under the Climate Action and Low Carbon Development (Amendment) Act 2021
Nature of the Plan/Programme	
Is the P/P prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use?	The LACAP is a cross-sectoral plan that targets a variety of sectors, including the energy, industry, transport, waste management and water management sectors.
Does the P/P provide a framework for the development consent for projects listed in the EIA Directive?	Neither LACAP nor the Plan Action Modifications to the LACAP provide a framework for development consent.
Is the P/P likely to have a significant effect on a Natura 2000 site which leads to a requirement for Article 6 or 7 assessments?	An NIR has been completed for the Draft LACAP. An AA Screening Report has been completed for the Plan Action modifications arising following the Plan/SEA consultation period. These documents have concluded that the neither the Draft LACAP nor Plan Action modifications will not give rise to any significant effects on designated European sites, alone or in combination with other plans or projects, with the adoption of defined mitigation measures.



SEA Applicability Analysis	
Exemptions	
Is the sole purpose of the P/P to serve national defence or civil emergency or is it a financial/budget P/P or is it co-financed by the current SF/RDF programme?	No, for all questions.

Table 4-2: Summary of SEA Applicability Analysis

Summary of SEA Applicability Analysis	
Applicability Analysis Criterion	Outcome (Yes or No)
Is the P/P prepared and/or adopted by an authority at national, regional or local level or prepared by an authority for adoption through a legislative procedure by Parliament or Government?	Yes
Is the P/P required by legislative, regulatory, or administrative provisions?	Yes
Is the P/P prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use?	Yes
Does the P/P provide a framework for the development consent for projects listed in the EIA Directive?	No
Is the P/P likely to have a significant effect on a Natura 2000 site which leads to a requirement for Article 6 or 7 assessments?	No
Is the sole purpose of the P/P to serve national defence or civil emergency or is it a financial/budget P/P or is it co-financed by the current SF/RDF programme?	No
Conclusion	
Having regard to the SEA Screening steps identified by the EPA guidance in Figure 1-1, Stage 2 SEA Screening Analysis is required to whether the Plan Action modifications to the Draft LACAP in this case are likely to have significant effects on the environment and whether SEA must be carried out on such Plan Action modifications.	



4.2 Stage 2 - SEA Screening Analysis

To inform the Stage 2 SEA Screening Analysis, an evaluation of the potential environmental implications of each Plan Action modification has been carried out. This evaluation is presented in Table 4-3.

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

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
G5	The following Action has been added to the Plan: <i>“Assist with the 2024 mid term review of the Cavan Cuilcagh Lakelands Geo Park Development Plan to ensure continuity of climate focused objectives with Climate Action Plan.”</i>	This action clarifies the resourcing support to be provided in relation to the Cavan Cuilcagh Lakelands Geo Park Development Plan. This action introduces no new environmental effects not already considered/mitigated against through the SEA ER process.
TR15	This action has been amended to add the following text: <i>"with alternatives such as HVO or biomethane"</i>	This amended action provides clarification on the type of fuels considered for use for the HGV fleet. It continues to support the local authority reducing its organisational GHG emissions. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA process.
N10	The Action has been amended to add the text "particularly heritage hedgerows" as follows: <i>“Prepare a roadside hedgerow management tool kit that informs staff on the value of hedgerows, particularly heritage hedgerows and outlines best practise in their management, having due regard to native hedgerows”</i>	This amended action provides clarification on the type of hedgerows that are of particular importance to provide information on in the hedgerow management tool kit. The action continues to generate some degree of positive effects for biodiversity, flora and fauna. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA process.
N12	The following new Action has been added to the Plan: <i>“Develop a tree and woodland plan to increase tree cover on council owned land, using appropriate species to store carbon, support nature, improve soils and water quality, and aid in flood protection</i>	This additional action has the potential to lead to positive environmental effects for biodiversity, landscape and visual amenities, water, and soil. The action is in keeping with existing NBS related action defined in the plan. It clarifies the action to be undertaken on Council land specifically.



Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
	and urban design. Aim to increase areas of public land under forestry through schemes such as Forest Creation on public lands.”	This action introduces no new environmental effects not already considered/mitigated against through the SEA ER process.
N16	The following text has been added to the Action: “Highlight the importance of cultivation and propagation of disease resistant plants e.g. plants resistant to diseases such as ash dieback”	This amendment clarifies the focus of promotional/awareness based activity under the action. The amendment will not introduce any significant environmental effects not already considered and mitigated against in the SEA process.
N17	The following new Action has been added to the Plan: “Promote not-for-profit tree planting programmes for targeted ecological improvements, ground stabilisation as a means of climate change mitigation, and carbon sequestration over the lifetime of the planted species”	This engagement-based action will not give rise to negative environmental effects. The action is in keeping with existing NBS related action defined in the plan. It clarifies the action to be undertaken on Council land specifically. It has the potential to produce slight positive effects for biodiversity, soil, climate, and water quality. It does not introduce any significant environmental effects not already considered and mitigated against in the SEA process
N21	The following new action has been added to the Plan: “Promote public education to increase awareness of the importance of bogs as both hydrological and carbon sinks, explaining their ability to reduce the effects of surface water run off during rainfall events and their ability to provide a subsequent slow release of water to the receiving environment. Awareness should be increased of the benefits of rewetting bogs and how these actions can be taken by landowners”	This initiative is engagement based and will not give rise to real environmental effects in and off itself. The guidance provided by the Council under the initiative will serve to inform the public on the importance of peatland environments, carbon sequestration, and peatland restoration initiatives. This additional action will not introduce any significant environmental effects not already considered and mitigated against in the SEA process.
C1	The action has been amended to include the following text: “Food production in community gardens”	The update to this action broadens the range of topics this awareness initiative will provide information and guidance on. This will have no discernable environmental effect in and of itself but, if successful, may lead to slight reductions in GHG emissions in the County and lead to greater community engagement in community food production. This additional action will not introduce any significant environmental effects not already considered and mitigated against in the SEA process.



Stage 2 SEA Screening Analysis has been carried out to determine whether a P/P is likely to have significant effects on the environment and whether SEA must be carried out in conjunction with a P/P. This analysis is presented in Table 4-4 and Table 4-5.

Table 4-4: Criteria for Determining the Likely Significance of Environmental Effects - Characteristics of the Plan

Potential Significant Effects	
Characteristics of the plan or programme having regard, in particular to:	
The degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources	<p>The Plan Action modifications do not set out a development control related framework for projects or activities, either with regard to the location, nature, size and operating conditions or by allocating resources.</p> <p>The Plan Action modifications will not result in the occurrence of any significant environmental effects in this regard.</p>
The degree to which the plan or programme influences other plans and programmes including those in a hierarchy	<p>Section 18, Part 3 of the Climate Acts 2015-2021 and Section 10 (2) of the Planning and Development Act 2000 (as amended) require that local authorities take account of their LACAPs when preparing a County Development Plan (CDP).</p> <p>The Plan Action modifications will not however influence the County Development Plan (CDP) to a degree that results in the occurrence of additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p>
The relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development	<p>The Plan Actions defined in the LACAP are broadly supportive of climate action (mitigation and adaptation) and sustainability. The Plan Actions will support the achievement of GHG emission reduction requirements.</p> <p>The Plan Action modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP.</p> <p>The Plan Action modifications will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p>
Environmental problems relevant to the plan or programme	<p>The Plan Action modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP. They do not give rise to any environmental problems not previously considered. The Plan Action modifications will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p>



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 modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP and do not materially alter the LACAP however.

Table 4-5: Criteria for Determining Potential for Significant Effects - Characteristics of the Effects

Potential for Significant Effects	
Characteristics of the Effects and the Area likely to be affected, having regard in particular to:	
The probability, duration, frequency and reversibility of the effects	<p>The Plan Action modifications will not result in any additional, likely significant environmental effects not already considered and mitigated against under the SEA and AA processes.</p> <p>The Plan Action modification will not create any material cumulative or transboundary environmental impacts.</p> <p>They will not create any risks to human health or the environment.</p> <p>They will not result in any environmental effect that will affect the sensitivity of the receiving environment or result in the exceedance of any prescribed Environmental Quality Standards.</p> <p>They will not result in an intensive land use not previously considered.</p>
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 modifications to the Draft LACAP in this case will not result in the occurrence of any additional environmental impacts not previously considered or mitigated against in the Draft LACAP.



5. CONCLUSIONS

SEA Screening was carried out to determine the need for a SEA for the Plan modifications to the Draft LACAP in this case. It has been concluded, based on the pre-screening check, and review against the environmental significance criteria as set out in Annex II of the SEA Directive, that the Modifications to the Draft LACAP will not give rise to likely significant effects on the environment.

The principal reasons the Modifications to the Draft LACAP will not give rise to likely significant effects on the environment are as follows:

- The modifications are only intended to provide clarification on existing Climate Actions defined in the Draft LACAP and make the LACAP more operative and focussed.
- The modifications are not material and will not result in any additional, likely significant environmental effects not already considered in the SEA Environmental Report for the Draft LACAP.

It is concluded that the Modifications to the Draft LACAP will not give rise to likely significant effects on the environment. Consequently, a full SEA is not required for the Plan modifications.



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APPENDIX 5

AA Screening Report





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APPROPRIATE ASSESSMENT SCREENING REPORT

**AA Screening Report For Modifications To
The Local Authority Climate Action Plan
2024 - 2029**

Prepared for:
Cavan County Council



**Comhairle Contae
an Chabháin**
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Appropriate Assessment Screening Report for Modifications to the Local Authority Climate Action Plan 2024 - 2029

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

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Client: Cavan County Council

Keywords: Appropriate Assessment Screening Report, Appropriate Assessment, AA, Natura Impact Report, LACAP, Climate Action Plan Implementation Plan.

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

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1. INTRODUCTION

1.1 Background

This is the Appropriate Assessment (AA) Screening Report for modifications to the Cavan County Council (CCC) 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 CCC. These submissions were taken into consideration prior to finalisation of the LACAP. CCC have prepared a Chief Executive Report on the submissions received. This document details the submissions received, CCC responses to the submissions, and Plan Action modifications arising following consideration of the submissions.

1.3 Purpose of this Assessment

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

¹ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment



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

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

1. The Cavan County Council LACAP 2024 - 2029.
2. The Draft NIR for the Cavan County Council LACAP 2024 - 2029.
3. The Draft SEA Environmental Report for the Cavan County Council LACAP 2024 - 2029.
4. Cavan County Council LACAP Submissions Chief Executive Report.
5. The SEA Screening Report for modifications to Cavan 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 CCC Draft LACAP. This report contains the information on the receiving environment, European sites, and potential effects of the Draft LACAP on European sites. The report also defines mitigation measures designed to avoid and minimise effects on European sites. The information contained in this Draft NIR has been referred to during the carrying out of the AA Screening Assessment documented in this report.

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



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

- Identification of European sites that may be impacted by Plan Action modifications.
- Identification of European sites pathways.
- Review of the NPWS site synopses and conservation objectives for relevant European sites.
- Examination of available information on protected species.

This desktop assessment mainly involved a review of the Draft NIR produced for the Draft LACAP.

The process of determining the likelihood of significant effects from a plan or a project on European sites is an iterative process centred around a Source-Pathway-Receptor (S-P-R) model. In order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) – e.g., pollutant run-off, noise, removal of vegetation etc.;
- Pathway(s) – ecological connectivity linkages e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – ecological resources supporting the qualifying habitats and species of European sites.

In the context of this report, a receptor is an ecological feature that is known to be utilised by the Qualifying Interests (QI) or Special Conservation Interests (SCI) of a European site. A source is any identifiable element of the Plan Action modifications that is known to interact with ecological processes. A pathway is any connection or link between the source and the receptor³.

An important element of the AA process is the identification of the Conservation Objectives, QIs and/ or SCIs of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

The likelihood of significant effects, including in-combination effects, on European Sites is then interrogated having regard to the nature and characteristics of Plan Action modifications, environmental pathways, and the sensitivity of relevant European sites.

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the Plan Action modification must be will be subject to Stage 2 AA and the preparation of a Natura Impact Report (NIR).

³ Qualifying interest or special conservation interests of the European site in question and the known sensitivities of these key ecological receptors



Having regard to the European Commission Communication on the Precautionary Principle (European Commission, 2000) the:

“absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved.”

This AA screening is based on best scientific knowledge and has utilised ecological expertise. In addition, a detailed online review of published scientific literature and ‘grey’ literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives.



3. MODIFICATIONS TO THE LOCAL AUTHORITY CLIMATE ACTION PLAN

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

Table 3-1: Summary of Plan Action Modifications

Action	Summary of Modification
G5	The following Action has been added to the Plan: "Assist with the 2024 mid term review of the Cavan Cuilcagh Lakelands Geo Park Development Plan to ensure continuity of climate focused objectives with Climate Action Plan."
TR15	This action has been amended to add the following text: "with alternatives such as HVO or biomethane"
N10	The Action has been amended to add the text "particularly heritage hedgerows" as follows: "Prepare a roadside hedgerow management tool kit that informs staff on the value of hedgerows, particularly heritage hedgerows and outlines best practise in their management, having due regard to native hedgerows"
N12	The following new Action has been added to the Plan: "Develop a tree and woodland plan to increase tree cover on council owned land, using appropriate species to store carbon, support nature, improve soils and water quality, and aid in flood protection and urban design. Aim to increase areas of public land under forestry through schemes such as Forest Creation on public lands."
N16	The following text has been added to the Action: "Highlight the importance of cultivation and propagation of disease resistant plants e.g. plants resistant to diseases such as ash dieback"
N17	The following new Action has been added to the Plan: "Promote not-for-profit tree planting programmes for targeted ecological improvements, ground stabilisation as a means of climate change mitigation, and carbon sequestration over the lifetime of the planted species"
N21	The following new action has been added to the Plan: "Promote public education to increase awareness of the importance of bogs as both hydrological and carbon sinks, explaining their ability to reduce the effects of surface water run off during rainfall events and their ability to provide a subsequent slow release of water to the receiving environment. Awareness should be increased of the benefits of rewetting bogs and how these actions can be taken by landowners"
C1	The action has been amended to include the following text: "Food production in community gardens"



4. SCREENING FOR APPROPRIATE ASSESSMENT

4.1 Introduction to Screening

This stage of the process identifies any likely significant effects to European Sites from the Plan Action modifications, either alone or in combination with other projects or plans.

The following has been considered when carrying out the AA Screening Assessment of Plan Action modifications to the Draft LACAP.

- The likely significant effect on the environment and European sites of implementing the Draft LACAP.
- The likely significant effect on the environment and European sites of implementing the Plan Action modifications.
- The mitigation measures defined in Section 5 of the Draft NIR.

Therefore, the Plan Action modifications must be considered in relation to the current Draft LACAP which has already been subject to SEA and AA considerations. All Plan Action modifications are considered therefore in the context of potential additional sources for impacts/effects which were not previously considered.

The first stage of the Screening process in this case involved interrogating Plan Action modifications to ascertain the materiality of the modifications and whether the modifications will result in the occurrence of additional effects on European sites not previously considered in the AA process to date.

4.2 Assessment Criteria

The following parameters are described when characterising impacts (following CIEEM (2016), EPA (2002) and NRA (2009)):

- **Direct and Indirect Impacts** - An impact can be caused either as a direct or as an indirect consequence of a proposed development.
- **Magnitude** - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- **Extent** - The area over which the impact occurs – this should be predicted in a quantified manner.
- **Duration** - The time for which the effect is expected to last prior to recovery or replacement of the resource or feature.
 - Temporary: Up to 1 Year;
 - Short Term: The effects would take 1-7 years to be mitigated;
 - Medium Term: The effects would take 7-15 years to be mitigated;
 - Long Term: The effects would take 15-60 years to be mitigated; and
 - Permanent: The effects would take 60+ years to be mitigated.
- **Likelihood** - The probability of the effect occurring taking into account all available information.
 - Certain/Near Certain: >95% chance of occurring as predicted;
 - Probable: 50-95% chance as occurring as predicted;
 - Unlikely: 5-50% chance as occurring as predicted; and
 - Extremely Unlikely: <5% chance as occurring as predicted.



The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

SSCOs have been prepared for a number of European Sites. These detailed SSCO's aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a species can be described as being achieved when: 'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.'

Favourable conservation status of a habitat can be described as being achieved when: 'its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable'.

Generic Conservation Objectives for SACs have been provided as follows:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

One generic Conservation Objective has been provided for SPAs as follows:

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

EC guidance⁴ outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take;
- Resource Requirements (Drinking Water Abstraction Etc.);
- Emissions (Disposal to Land, Water or Air);

⁴ Assessment of plans and Projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Environment DG, 2001.



- Excavation Requirements;
- Transportation Requirements;
- Duration of Construction, Operation, Decommissioning.

In addition, the guidance outlines the following likely changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Reduction of Habitat Area.
- Disturbance to Key Species.
- Habitat or Species Fragmentation.
- Reduction in Species Density.
- Changes in Key Indicators of Conservation Value (Water Quality Etc.).
- Climate Change.

4.3 Elements of the Plan Modifications with Potential to Give Rise to Effects

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



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

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
G5	The following Action has been added to the Plan: “Assist with the 2024 mid term review of the Cavan Cuilcagh Lakelands Geo Park Development Plan to ensure continuity of climate focused objectives with Climate Action Plan.”	This action clarifies the resourcing support to be provided in relation to the Cavan Cuilcagh Lakelands Geo Park Development Plan. This action introduces no new environmental effects not already considered/mitigated against through the AA process.
TR15	This action has been amended to add the following text: "with alternatives such as HVO or biomethane"	This amended action provides clarification on the type of fuels considered for use for the HGV fleet. It continues to support the local authority reducing its organisational GHG emissions. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the AA process.
N10	The Action has been amended to add the text "particularly heritage hedgerows" as follows: “Prepare a roadside hedgerow management tool kit that informs staff on the value of hedgerows, particularly heritage hedgerows and outlines best practise in their management, having due regard to native hedgerows”	This amended action provides clarification on the type of hedgerows that are of particular importance to provide information on in the hedgerow management tool kit. The action continues to generate some degree of positive effects for biodiversity, flora and fauna. This amendment will not introduce any significant environmental effects not already considered and mitigated against in the AA process.
N12	The following new Action has been added to the Plan: “Develop a tree and woodland plan to increase tree cover on council owned land, using appropriate species to store carbon, support nature, improve soils and water quality, and aid in flood protection and urban design. Aim to increase areas of public land under forestry through schemes such as Forest Creation on public lands.”	This additional action has the potential to lead to positive environmental effects for biodiversity, landscape and visual amenities, water, and soil. The action is in keeping with existing NBS related action defined in the plan. It clarifies the action to be undertaken on Council land specifically. This action introduces no new environmental effects not already considered/mitigated against through the AA process.
N16	The following text has been added to the Action: “Highlight the importance of cultivation and propagation of disease resistant plants e.g. plants resistant to diseases such as ash dieback”	This amendment clarifies the focus of promotional/awareness based activity under the action. The amendment will not introduce any significant environmental effects not already considered and mitigated against in the AA process.



Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
N17	<p>The following new Action has been added to the Plan:</p> <p>“Promote not-for-profit tree planting programmes for targeted ecological improvements, ground stabilisation as a means of climate change mitigation, and carbon sequestration over the lifetime of the planted species”</p>	<p>This engagement-based action will not give rise to negative environmental effects. The action is in keeping with existing NBS related action defined in the plan. It clarifies the action to be undertaken on Council land specifically. It has the potential to produce slight positive effects for biodiversity, soil, climate, and water quality. It does not introduce any significant environmental effects not already considered and mitigated against in the AA process</p>
N21	<p>The following new action has been added to the Plan:</p> <p>“Promote public education to increase awareness of the importance of bogs as both hydrological and carbon sinks, explaining their ability to reduce the effects of surface water run off during rainfall events and their ability to provide a subsequent slow release of water to the receiving environment. Awareness should be increased of the benefits of rewetting bogs and how these actions can be taken by landowners”</p>	<p>This initiative is engagement based and will not give rise to real environmental effects in and off itself. The guidance provided by the Council under the initiative will serve to inform the public on the importance of peatland environments, carbon sequestration, and peatland restoration initiatives.</p> <p>This additional action will not introduce any significant environmental effects not already considered and mitigated against in the AA process.</p>
C1	<p>The action has been amended to include the following text:</p> <p>“Food production in community gardens”</p>	<p>The update to this action broadens the range of topics this awareness initiative will provide information and guidance on. This will have no discernable environmental effect in and of itself but, if successful, may lead to slight reductions in GHG emissions in the County and lead to greater community engagement in community food production. This additional action will not introduce any significant environmental effects not already considered and mitigated against in the AA process.</p>



4.1 Summary of the Evaluation

The Plan Action modifications are broadly intended to provide clarification on existing information and give better effect to the LACAP having regard to the consultation process. They will not result in any additional sources for likely, significant environmental effects, including effects on ecological processes or European sites, not already considered by the existing NIR for the Draft LACAP.

The Plan Action modifications will not introduce any of the following types of additional environmental effect that have the potential to affect European sites.

- Land take;
- Resource Requirements (Drinking Water Abstraction Etc.);
- Emissions (Disposal to Land, Water or Air);
- Excavation;
- Transportation;
- Construction, Operation, Decommissioning activities.

The Plan Action modifications will not result in any of the following types of change that may occur at a European site, which may result in effects on the integrity and function of that site:

- Reduction of Habitat Area.
- Disturbance to Key Species.
- Habitat or Species Fragmentation.
- Reduction in Species Density.
- Changes in Key Indicators of Conservation Value (Water Quality Etc.).
- Climate Change impact.

Further assessment is therefore not required.

4.2 Other Plans and Programs

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or programmes that might, in combination with the plan or project, have the potential to adversely impact upon European Sites. There are no additional sources for effects identified within the Proposed amendments; therefore, there are no in-combination effects.



5. CONCLUSION

Stage 1 Screening for AA of Plan modifications was carried out to determine the need for a full AA for the Plan modifications to the Draft LACAP in this case. It has been demonstrated that implementation of the Plan modifications are not foreseen to have any significant effects on any European Site.

The principal reasons the Modifications to the Draft LACAP do will not give rise to any likely significant effects on designated European sites, alone or in combination with other plans or projects, are as follows:

- The modifications are only intended to provide clarification on existing Climate Actions defined in the Draft LACAP and make the LACAP more operative and focussed.
- The modifications are not material and will not result in any additional, likely significant environmental effects, including effects in ecological processes or European sites, not already considered in the NIR for the Draft LACAP.

It is concluded in view of best scientific knowledge and in view of conservation objectives, that the Modifications to the Draft LACAP will not give rise to any likely significant effects on designated European sites, alone or in combination with other plans or projects. Consequently, a Stage 2 AA is not required for the Plan modifications.



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APPENDIX 1

Author Details



Author Details

Lead Author - Andrew Torsney is a Principal Ecologist with over 12 years' experience working on major national and local scale projects. Andrew graduated from University College Dublin in 2011 with a B.Sc. degree in Zoology and obtained Master's degree in Biodiversity and Conservation from the University of Leeds in 2012. He has a range of ecological skills which include habitat mapping, ecological surveying, data interpretation and report writing. Andrew is a vegetative plant specialist, who has a wealth of experience classifying riparian habitats and identifying rare floral species. Andrew has a vast knowledge of riparian and freshwater ecosystems and undertakes freshwater surveys regularly. Andrew holds 4 national protected species licenses and has a lot of experience optioning surveying licenses for aquatic species such as the white clawed crayfish. He is also a Bat specialist with a wealth of experience, in acoustic surveying and monitoring of bats. Throughout Andrews' career he has worked on a number of large-scale multifaceted projects such as the Killaloe to Dublin water supply project NIS. For this work, Andrew designed and oversaw all ecological field work relating to the Environmental Impact Assessment (EIA) and AA.

Andrew has been the principal ecologist for a range of projects including the AA of the National Wind Energy Guidelines, a number of AAs for County Councils and a range of large-scale infrastructure projects.



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