FEHILY TIMONEY

CONSULTANTS IN ENGINEERING, ENVIRONMENTAL SCIENCE & PLANNING

TIPPERARY LOCAL AUTHORITY CLIMATE ACTION PLAN 2024-2029

Natura Impact Report

Prepared for:

Tipperary County Council

Comhairle Contae Thiobraid Árann
Tipperary County Council

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

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

CORK | DUBLIN | CARLOW

www.fehilytimoney.ie

Natura Impact Report for the Tipperary Local Authority Climate Action Plan 2024-2029

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Abstract: Fehily Timoney and Company is pleased to submit this Natura Impact Report for the Local Authority Climate Action Plan 2024-2029.

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1. INTRODUCTION

1.1 Background

This Natura Impact Report (NIR) was prepared in support of the Appropriate Assessment (AA) of the Tipperary Local Authority Climate Action Plan 2024-2029 in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the "Habitats Directive").

This report is part of the AA process that wasundertaken alongside the preparation of the LACAP.

1.2 Post Draft Plan Consultation Revisions

This document is the final NIR produced on adoption of the LACAP. An earlier draft version of this report has been updated having regard to the consultation submissions made during the Draft Plan consultation period, recommendations made in the Chief Executive (CE) Report on consultation submissions, and the modifications 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/ecological 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 AA. The AA Screening Report for the post consultation Plan modifications are presented in Appendix 3. All amended actions and additional actions added subsequent to the consultation period are documented, considered and evaluated in the AA Screening Report. Where original actions have been modified after consultation, the text of the actions have been appropriately updated in this NIR. The Plan modificcations were determined to be non-material and did not introduce any additional environmental/ecological effects not previously considered and mitigated during the SEA and AA processes.

An AA Conclusion Statement will now be prepared on how the AA process shaped the content of the final plan.

1.3 Legislative Context

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 (Council 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 of them. These two designations are collectively known as European sites which form the Natura 2000 Network.

AA is required by the Habitats Directive, as transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act (as amended). AA is an assessment of the potential for adverse or negative effects of a plan or project, in combination with other plans or projects, on the conservation objectives of a European site. These sites consist of SACs and SPAs and provide for the protection and long-term survival of Europe's most valuable and threatened species and habitats.

1.4 Approach

The AA 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[1] was conducted. This included a detailed review of the National Parks and Wildlife (NPWS) website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives (including spatial data collected for the most recent Article 17 conservation status reporting cycle, 2019).

In addition to being informed by these reports, the NIR was also informed by the accompanying SEA Environmental Report and the Tipperary County Development Plan 2022 - 2028 and associated SEA Environmental Report and AA Natura Impact Report.

All of these data sources are likely to be useful for AAs that must be undertaken for lower-tier plans/projects under the Plan.

The ecological desktop study completed for the AA of the LACAP comprised the following elements:

- Identification of European sites within 15km of the LACAP boundary with identification of potential pathways links for specific sites (if relevant) greater than 15km from the LACAP boundary;
- Review of the NPWS site synopsis and conservation objectives for European sites with identification of potential pathways from the LACAP area; and
- Examination of available information on protected species.

There are four main stages in the AA process as follow:

Stage One: Screening

The process that identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

[1] Various documents where publishing, in journals for example, is not the primary activity of the producing body. Examples include: conference presentations; regulatory data; unpublished trial data; government publications; and dissertations/theses.

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

The Habitats Directive promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the plan-making process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse effects on the site(s) remain. If potential effects on European sites remain, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan/project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effect(s).

The assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model[2], where, 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 model is sufficient to conclude that a potential effect is not of any relevance or significance.

In the interest of this report, receptors are the ecological features that are known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the Draft LACAP provision that is known to interact with ecological processes. The pathways are any connections or links between the source and the receptor. This report provides information on whether direct, indirect and cumulative adverse effects could arise from the LACAP.

The NIR exercise has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;
- "Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;
- "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, 2002; and
- "Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC", European Commission, 2000; and
- Appropriate Assessment Screening for Development Management; OPR Practice Note PN01; Office of the Public Regulator, 2021.

[2] Source(s) – e.g. pollutant run-off from proposed works; Pathway(s) – e.g. groundwater connecting to nearby qualifying wetland habitats; and Receptor(s) – qualifying aquatic habitats and species of European Sites

The scope of the AA was informed by the submissions received on the scope of the accompanying Strategic Environmental Assessment[3] (SEA) process being undertaken on the LACAP, including a submission from the Department of Culture, Heritage and the Gaeltacht that provided various information and suggestions relevant to the AA.

[3] Strategic Environmental Assessment (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.

2. DESCRIPTION OF LOCAL AUTHORITY CLIMATE ACTION PLAN

2.1 Overview

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

The Tipperary LACAP 2024-2029 provides a five-year framework to:

- Actively translate national climate policy to local circumstances with the prioritisation and acceleration of evidence-based measures;
- Assist in the delivery of the climate neutrality objective at local and community levels;
- Identify and deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area. This will be done through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective[4].

The preparation of the LACAP was informed by a process of public participation and consultation. The LACAP represents an important policy document that will form the foundations to support and facilitate coordinated climate action, which is focused on local, area specific issues.

The Plan will be set within the context of the strategic framework of and be guided by the most recent approved national long term climate action strategy and sectoral adaptation plans as well as the Tipperary County Development Plan 2022 – 2028.

Figure 2-1 illustrates the functional area and boundary of Tipperary County Council.

2.2 Context setting background to Tipperary County Council's Role and the LACAP

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.

[4] This is known as the National 2050 Climate Objective which establishes the national objective of achieving a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050.

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 Climate Action and Low Carbon Development (Amendment) Act provides a statutory underpinning to climate action in Ireland. It specifies the requirement to develop a national Climate Action Plan (CAP) (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.

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021defines the requirement for Local Authorities to prepare individual LACAPs for their functional area. The purpose of LACAPs will be to deliver effective climate action and mitigation at local authority and community levels. Local Authority County Development Plans must also be aligned with their LACAP, and consideration to the Tipperary County Development Plan 2022 – 2028 has been integral to this process to help support this objective.

The LACAPs are statutory plans that must be subject to SEA under the SEA Directive (Directive 2001/42/EC) to determine their effect on the environment, and AA under Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) to determine if their implementation is likely to have significant effects on any Natura 2000 sites.

The statutory plan making process, which commenced on February 24th 2023, is 12 months in duration so the LACAPs must be completed on February 23rd, 2024. Another 30-day timeframe is allowed after this for the publication of the LACAP.

Legend

Local Authority Boundaries

Local Authority Boundary

TIPPERARY COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	2.1		
CLIENT:	TIPPERARY COUNTY COUNCIL		
DATE:	26/07/2023	**SCALE:**	1:440,000 @ A3

N W E S

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2.3 Tipperary County Councils Role with regard to Climate Action and the LACAP

Local authorities are key drivers in advancing climate policy at the local level. The LACAP will help Tipperary County Council to address, in an integrated way, the mitigation of greenhouse gas emissions and climate change adaptation and strengthen the alignment between national climate policy and the delivery of effective local climate action.

Tipperary County Council is free to determine their own approach to the style and structure of their climate action plans but must demonstrate alignment with the key principles of the national Climate Action Plan and subject to compliance with all relevant guidelines ensuring that the local plan is ambitious, action-focused, evidence-based, participative and transparent.

2.4 Purpose and Scope of the LACAP 2024-2029

2.4.1 Need for the Plan

The Tipperary Local Authority Climate Action Plan (2024-2029) will consider specific adaptation and mitigation measures across key themes including Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions, Resource Management and Citizen Engagement.

2.4.2 Objectives of the LACAP

The Tipperary County Council LACAP will, through the development and implementation of specific, action-focused, time-bound and measurable actions, and using a collaborative approach with both internal and external stakeholders:

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 overall objectives of the LACAP are:

- A 50% improvement in the council's energy efficiency by 2030;
- A 51% reduction in the Council's greenhouse gas emissions by 2030 to reach net zero by 2050;
- To make Tipperary a climate resilient region, by reducing the impacts of future climate change-related events; and
- To actively engage and inform citizens on climate change.

2.4.3 Themes and example actions

Theme	Description/Overview	Strategic Goals	Examples of Actions
Governance and Leadership	This Theme is about the organisational change required to mainstream Climate Action access all services and functions in the Local Authority (outward facing role). This is a key leadership function. This theme also sets out a commitment for the Council to achieve is own emission reductions targets Internal Facing).	To show leadership and ambition in 'Setting the Scene for Going Green'; by achieving our own 51% energy efficiency targets by 2030, by mainstreaming climate action (mitigation and adaptation) across our services, by governance change and awareness as a key aspect of the delivery of all Council functions and services, by seeking to influence local and national policy so that it can effectively leverage this leadership position, and by developing, piloting and supporting innovation for transformative decarbonising and climate action projects.	Actively co-ordinate and implement this strategic goal by maintaining a governance structure for climate action comprising of a dedicated Climate Action Director of Services, a Steering Group at Senior Management level and a Climate Action Team comprising senior staff across all services. Prepare and apply a protocol to enable and require a pre-set standard for 'Climate Proofing' of all local authority led capital plans, purchases and investment for example; projects funded under the Outdoor Recreation Scheme, Active Travel Scheme, Urban Regeneration and Development Fund etc. Update the organisation's travel management system to ensure that it incorporates tracking and reporting mechanisms for EV vehicles and tracks, emission reductions when alternative modes of travel are used e.g. bus, train, bike. Carry out a review of all Council owned buildings and land assets to determine capacity for reuse and occupation and set out an action plan for best use of these assets to help achieve emissions reductions targets.
	This Theme is designed to ensure that the council services and emergency response adapts to and responds to climate change.	Protect our assets and critical infrastructure from extreme weather events, and to ensure a coordinated and resourced emergency response from all climate related emergencies and events, including flooding.	To carry out a feasibility assessment with the DHLGH to determine if it is possible to identify waterbodies that are both particularly vulnerable to drought associated with climate change and at risk of not meeting the requirements of the EU Water Framework Directive. Carry out an Ecological/Habitat audit of local authority owned land, in accordance with an agreed methodology, to identify areas suitable for restoration and enhanced carbon storage though planting and biodiversity measures.

Theme	Description/Overview	Strategic Goals	Examples of Actions
			Undertake Climate Risk Assessment of local authority owned heritage assets (natural and built) in accordance with Guidance to be published in 2023 by the Department of Housing, Local Government and Heritage.
Built Environment and Transport	This Theme addresses the Councils commitments to achieving and monitoring its own 2030 and 2050 GHG emissions reductions targets and supporting sections in the areas of Built Env and Transport.	To reduce greenhouse gas emissions, increase the use of renewable energy sources and increase energy efficiency throughout our housing, offices, infrastructure and transport fleet in line with national 2030 and 2050 targets.	Prepare and implement a carbon savings programme of measures for Council buildings/facilities to assist in achieving a 51% reduction in non-electrical related greenhouse gas emissions by 2030. Programme to include for the following: • Agreed schedule of buildings to be upgraded with phasing and costing. • Rainwater collection/water conservation measures • Nature based solutions • Renewable Energy technologies • Lifecycle analysis/GPP • Consideration of specialist building requirements i.e. HVAC in Museum, fire training services. Participate/lead in national/regional funding programmes for local authorities, for example, the SEAI 'Pathfinder' programme to support funding for emissions reductions measures. Continue to roll-out the Council's Active Travel Programme maximising available funding from the National Transport Authority (NTA) Promote and encourage a modal shift to active travel and public transport by raising awareness of Active Travel Infrastructure throughout Tipperary.

Theme	Description/Overview	Strategic Goals	Examples of Actions
	This Theme commits to the embedding and mainstreaming climate action throughout our spatial planning frameworks.	Through our spatial planning policy and objectives support the Core Strategy of the Tipperary County Development Plan (any and review thereof), having consideration to core objectives as they relate to sustainable development, including aspects such as Town centre first, active travel, sustainable energy and compact development etc.	Through the Town-Centre First programme, reduce vacancy and dereliction in Key Towns, District Towns and Service Centres by collaborating with owners in finding ways that these structures can be brought back to use. Support the delivery of an integrated Travel Hub in the Key Towns of Clonmel, Nenagh and Thurles to incorporate and support multi-modal services and active travel linkages with town centre areas. Carry out a review of the Council Development Contribution Scheme to determine if it is feasible to positively incentivise 'Low-Carbon Development' and 'Community-Led development'. Prepare a Master Plan for the centre of excellence for the Bio-Economy and adjoining areas at Lisheen/Mid-Tipperary Decarbonising Zone in line with the objective of the County Development Plan.
Natural Environment and Green Infrastructure	This theme seeks, through a collaborative approach, to protect our environment, and its biodiversity and water catchments as key enablers of climate adaptation and mitigation across the county.	Promote and protect our environment, and its biodiversity and water catchments as key enablers of climate adaptation and mitigation across the county through the delivery of sustainable services, including those with a focus on nature-based solutions, in collaboration with sectors and communities.	Develop and implement Nature-based Solutions (NBS) and integrated rainwater management protocol for both Council and private sector projects and seek to prioritise NBS over conventional systems where cost effective. A protocol for NBS will address the following: • Part 8 processes for active travel, roads, public realm projects, public housing, footpath upgrades, public and council carparks, greenway/blueway planning etc with targets for all. • Taking in charge – put in a plan and resource taking in charge. • Plan and resource maintenance. • Build in education and awareness for public and elected members. • Inland Fisheries Ireland guidance for watercourses to be integrated into council policy.

Theme	Description/Overview	Strategic Goals	Examples of Actions
			Carry out a review of Section 4 Discharge to Water Licences to determine if they are fit for purpose to meet projected Climate Change hydrological changes and water temp increases. Undertake a county wetland survey to include identification of priority areas for habitat restoration for carbon and biodiversity benefits, and also to consider historic maps and archive sources to identify areas of previous wetlands that may be suitable for restoration. Develop a plan to deliver restoration based on the outcomes. Support existing citizen science initiatives including National Biodiversity Data Centre biodiversity recording through training of public/stakeholders and publicising schemes and resources.
Communities: Resilience and Just Transition	This Theme seeks to build capacity and readiness with communities and other strategic partners to effect transformative climate action and motivate demand for climate action through capacity building programmes and actions.	Build capacity and readiness with communities and other strategic partners to effect transformative climate action and motivate demand for climate action through capacity building programmes, policy/financial instruments and local development and wellbeing programmes and Promote climate action and green skills in training and education in partnership with Education and Training Boards (ETBs) and Local Enterprise Offices (LEOs).	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. Identify ways to support grant administrators in their role as influencers of climate action/sustainability through administration of grants across council services. Increase awareness of climate reduction initiatives and energy efficient grants to SME's. This will take the format of marketing and promotion via media advertising, social media platforms, press releases and attendance at workshops and seminars. Manage and administer funding and work with owners and communities, to safeguard archaeological heritage in public and private ownership through the 'Community Monuments Fund'.

Theme	Description/Overview	Strategic Goals	Examples of Actions
		Embed climate change and the circular economy approach in implementation of all local economic development strategies and plans for example, the Local Economic and Community Plan, Local Development Strategy etc.	In the development of new local authority plans, programmes or strategies, climate action (mitigation and adaption), the UN Sustainable Development Gaols and circular economy awareness shall be mainstreamed as a strategic objective. Incorporate and embed climate action/circular economy awareness into all Council led educational programmes for example museum, arts, culture and heritage, community development.
Sustainability and Resource Management	This theme seeks to encourage and engage sustainable practices using renewable and carbon neutral technology and to increase the proportion of green procurement so we can influence, measure and reduce emissions from the p production, transportation and disposal of goods and services we procure and use and enable a circular economy though our own actions.	Enable the development of a circular economy across sectors and communities based on sustainable practices using renewable and carbon neutral technology and to increase the proportion of green procurement so we can influence, measure and reduce emissions from the production, transportation and disposal of goods and services we procure and use and enable a circular economy though our own actions.	Apply Green Public Procurement (GPP) criteria when tendering for services and Capital Works Projects. Through the 'Lean for Micro' programme support the implementation of the first steps to Green Competitiveness by examination and elimination of wastes in a business. Support a circular economy and reduce waste by identifying and producing a range of standard council merchandise/props etc. that can be used across the organisation.
		Influence, co-ordinate and facilitate and advocate for other agencies, sectors and communities wherever feasible though the delivery of our services, in the implementation of other sectoral plans at local level.	Work with and support the National Transport Authority and Tipperary Transport Co-ordination Unit in the delivery and expansion of public transport initiatives the county. In conjunction with Failte Ireland, collaborate with tourism operators and stakeholders in Tipperary to assist them in imbedding climate action and responsible tourism practices in county Tipperary.

Theme	Description/Overview	Strategic Goals	Examples of Actions
			Advocate for improved rail transport services on the Wexford to Limerick interregional route, key improvements to include: • The reopening of the rail route between Rosslare harbour and Waterford Town; • Improved rail services/facilities on the existing rail routes that services Tipperary Towns; • The development of a rail freight hub at Limerick Junction (in lie with the objective of the County Development Plan).

2.4.4 LACAP Geographic Area

The LACAP area covers Tipperary County Council's entire boundary, and all actions are set to be completed within the boundary. Where actions require collaborative efforts with neighbouring County Councils, these will be considered; however, these are thought to be captured within the LACAP (and SEA/AA processes) for each of the neighbouring County Councils.

The geographic scope of the LACAP, therefore, is the County Council boundary, and the SEA study area extends to 15km beyond this to consider wider reaching environmental impacts as can be seen in Figure 2-1.

2.4.5 Infrastructure Projects Supported by the LACAP

The Climate Action Plan (DECC, 2019) states that 'Each local authority will identify and develop plans for a spatial area(s), in which a range of climate mitigation, adaptation and biodiversity measures and actions are identified to address local low carbon energy, greenhouse gas emissions and climate needs to contribute to national climate action targets'. 'Decarbonising Zones' should address wider co-benefits including air quality, improved health, biodiversity, embodied carbon, agricultural practices, sustainable land management, lower noise levels, waste, water, circular economy etc. A Decarbonising Zone can also explore the co-benefits of climate adaptation, and local measures such as climate proofing, afforestation, green and blue infrastructure, reducing heat island effects, citizen awareness and behavioural change. The three main categories of bioenergy are biomass, bioliquids and biofuels.

TCC has identified the Lisheen Mine and Lisheen Bog area and the wider area, centred on the National Bioeconomy Campus, as the first candidate Decarbonising Zone in the county, with co-benefits in terms of tourism and amenity (Littleton Labyrinth and Bushcraft Survival Destination Plan). This Decarbonising Zone designation recognises the importance of the bioeconomy in Tipperary and the potential for synergies with other areas including renewable energy, land use diversification, carbon capture and tourism and amenity.

The Mid-Tipperary Decarbonising Zone is centred on the existing Centre of Excellence for the Bioeconomy. This development is identified and supported by the Tipperary County Development Plan 2022 – 2028 , a Master Plan is currently being developed for the area by the Planning Authority. The extent of the Decarbonising Zone is outlined below and the location of the National Bio-economy Campus (centre of the former Lisheen Mine) is identified in Figure 2-2.

A Register of Opportunities will be included in the LACAP, these are set out below. Actions will be developed under these action areas to advocate, facilitate and support climate action in the area.

- Support, enable and promote the National Bio-economy Campus at Lisheen in conjunction with stakeholders;
- Support and enable all villages in the DZ to participate in a village network, to help them access supports such as the SEAI 'Sustainable Energy Communities' and similar collaborative actions to facilitate climate action, village regeneration and community and economic development;
- Support and implement Just Transition Funding through the JTF Programme;
- Enable sustainable Renewable Energy development/R and D in the area both at the commercial and community scale;
- Roll-out Local Authority LACAP initiatives in the DZ area;
- Coordinate Multi Agency collaboration though stakeholder identification and the maintenance of a collaborative and active group of stakeholders;
- Advocate for Sustainable Travel and Mobility, and better connectivity in the area with national transport networks;

- Build community and stakeholder Awareness and Capacity around positive and effective climate action;
- Consider the development and implementation of a collaborative/innovative approach to nature-based and biodiversity rich land-use solutions in the area, including opportunities to consider on a catchment (or otherwise) basis to support water quality improvement, carbon capture, peatland restoration, land use diversification and flood risk management
- Support Sustainable Tourism using the natural, cultural and historical assets of the area.

The LACAP will also support other general/non-specific climate related infrastructural projects that are already addressed by current spatial planning policy (subject to SEA and AA processes), these including active travel programmes, town centre first programmes, regeneration, green and blue infrastructure, transport hubs in the key towns etc.

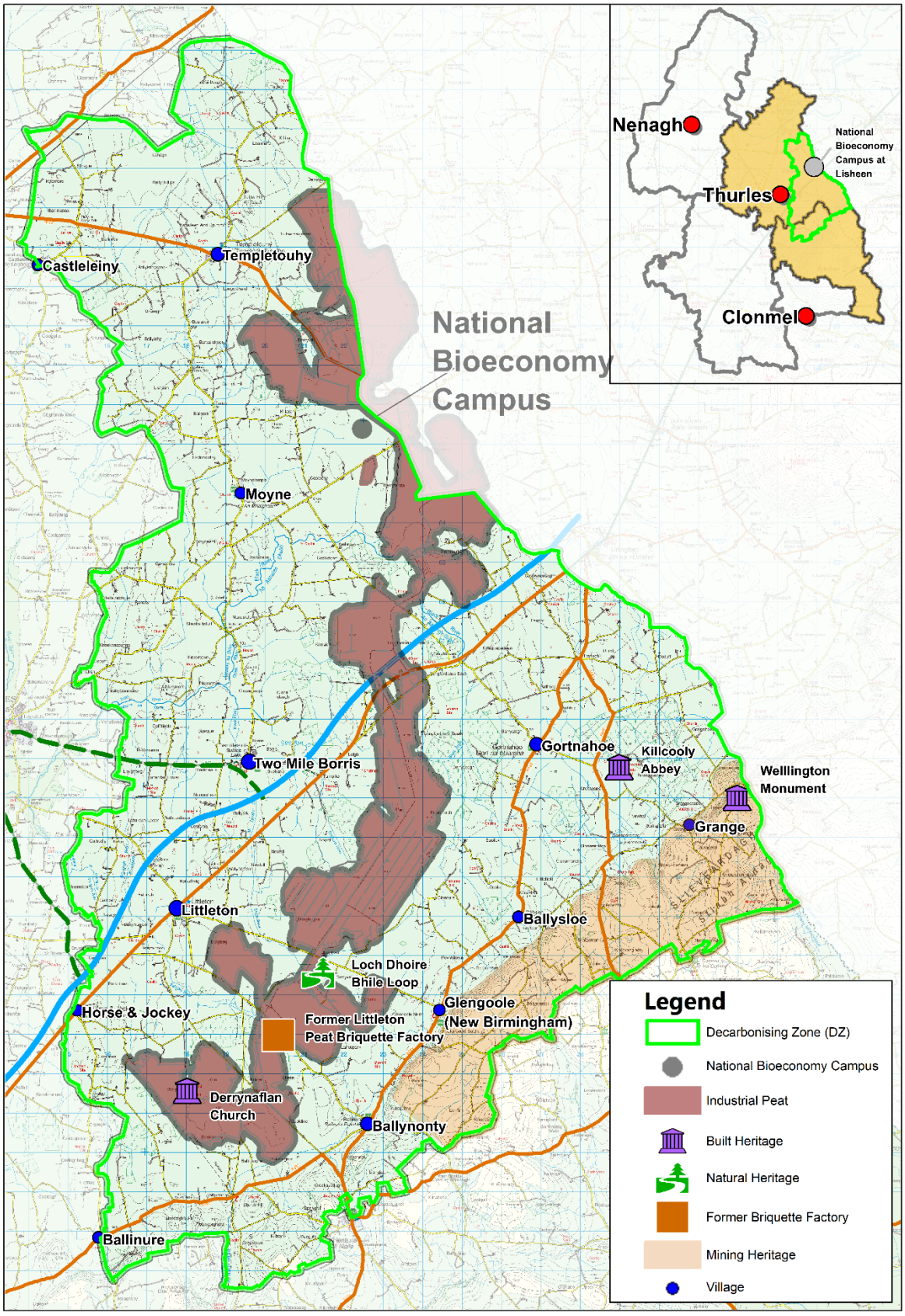


Figure 2-2: Mid-Tipperary Decarbonising Zone (source: Tipperary County Council)

3. SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Introduction to Screening

This stage of the process identifies any potential significant affects to European sites from a project or plan, either alone or in combination with other projects or plans.

An important element of the AA process is the identification of the "'conservation objectives", "Qualifying Interests" (QIs) and/ or "Special Conservation Interests" (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 following NPWS Generic Conservation Objectives have been considered in the screening:

- For SACs, 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; and
- For SPAs, to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Where available, Site-Specific Conservation Objectives (SSCOs) designed to define favourable conservation status for a particular habitat[5] or species[6] at that site have been considered.

3.2 Identification of Relevant European Sites

The Department of the Environment (2009) Guidance on AA recommends a 15 km buffer zone to be considered. Although sites beyond this buffer zone would be considered if relevant, a review of all sites within this zone has allowed the conclusion to be made that in the absence of significant hydrological links the characteristics of the LACAP will not impose effects beyond the 15 km buffer. The assessment process also considers hydrogeological processes and possible effects to ground water with respect to ground water sensitive habitats and species.

[5] Favourable conservation status of a habitat is achieved when: its natural range, and area it covers within that range, are stable or increasing; the specific structure and functions which 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.

[6] The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is 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.

Details of European sites that occur within 15 km of the LACAP boundary are provided in Table 3-1. European sites and EPA Rivers Catchments are also mapped in Figure 3-1 below. Information on QIs, SCIs and site-specific vulnerabilities and sensitivities (see Appendix 1) and background information (such as that within Ireland's Article 17 Report to the European Commission, site synopses and Natura 2000 standard data forms) have been considered by both the AA screening assessment (provided under this section) and Stage 2 AA (provided under Section 4). Conservation objectives that have been considered by the assessment are included in the following National Parks and Wildlife Service documents:

- NPWS (2018) Conservation Objectives for Danes Hole, Poulnalecka SAC [IE0000030] Version 1.
- NPWS (2022) Conservation Objectives for River Shannon Callows SAC [IE0000216] Version 1.
- NPWS (2015) Conservation Objectives for Barroughter Bog SAC [IE0000231] Version 1.
- NPWS (2016) Conservation Objectives for Cloonmoylan Bog SAC [IE0000248] Version 1.
- NPWS (2018) Conservation Objectives for Derrycrag Wood Nature Reserve SAC [IE0000261] Version 1.
- NPWS (2019) Conservation Objectives for Loughatorick South Bog SAC [IE0000308] Version 1.
- NPWS (2018) Conservation Objectives for Pollnaknockaun Wood Nature Reserve SAC [IE0000319] Version 1.
- NPWS (2019) Conservation Objectives for Hugginstown Fen SAC [IE0000404] Version 1.
- NPWS (2020) Conservation Objectives for The Loughans SAC [IE0000407] Version 1.
- NPWS (2016) Conservation Objectives for Slieve Bloom Mountains SAC [IE0000412] Version 1.
- NPWS (2016) Conservation Objectives for All Saints Bog and Esker SAC [IE0000566] Version 1.
- NPWS (2015) Conservation Objectives for Sharavogue Bog SAC [IE0000585] Version 1.
- NPWS (2015) Conservation Objectives for Ballyduff/Clonfinane Bog SAC [IE0000641] Version 1.
- NPWS (2016) Conservation Objectives for Galtee Mountains SAC [IE0000646] Version 1.
- NPWS (2016) Conservation Objectives for Kilcarren-Firville Bog SAC [IE0000647] Version 1.
- NPWS (2021) Conservation Objectives for Nier Valley Woodlands SAC [IE0000668] Version 1.
- NPWS (2021) Conservation Objectives for Cullahill Mountain SAC [IE0000831] Version 1.
- NPWS (2021) Conservation Objectives for Spahill and Clomantagh Hill SAC [IE0000849] Version 1.
- NPWS (2018) Conservation Objectives for Ridge Road, SW of Rapemills SAC [IE0000919] Version 1.
- NPWS (2018) Conservation Objectives for Clare Glen SAC [IE0000930] Version 1.
- NPWS (2018) Conservation Objectives for Kilduff, Devilsbit Mountain SAC [IE0000934] Version 1.
- NPWS (2018) Conservation Objectives for Silvermine Mountains SAC [IE0000939] Version 1.
- NPWS (2018) Conservation Objectives for Glenomra Wood SAC [IE0001013] Version 1.
- NPWS (2017) Conservation Objectives for Keeper Hill SAC [IE0001197] Version 1.
- NPWS (2018) Conservation Objectives for Rosturra Wood SAC [IE0001313] Version 1.
- NPWS (2017) Conservation Objectives for Glen Bog SAC [IE0001430] Version 1.
- NPWS (2018) Conservation Objectives for Glenstal Wood SAC [IE0001432] Version 1.
- NPWS (2018) Conservation Objectives for Liskeenan Fen SAC [IE0001683] Version 1.
- NPWS (2018) Conservation Objectives for Philipston Marsh SAC [IE0001847] Version 1.
- NPWS (2019) Conservation Objectives for Galmoy Fen SAC [IE0001858] Version 1.
- NPWS (2021) Conservation Objectives for Comeragh Mountains SAC [IE0001952] Version 1.
- NPWS (2018) Conservation Objectives for Bolingbrook Hill SAC [IE0002124] Version 1.

- NPWS (2021) Conservation Objectives for Anglesey Road SAC [IE0002125] Version 1.
- NPWS (2017) Conservation Objectives for Pollagoona Bog SAC [IE0002126] Version 1.
- NPWS (2017) Conservation Objectives for Lower River Suir SAC [IE0002137] Version 1.
- NPWS (2019) Conservation Objectives for Lisduff Fen SAC [IE0002147] Version 1.
- NPWS (2011) Conservation Objectives for River Barrow and River Nore SAC [IE0002162] Version 1.
- NPWS (2012) Conservation Objectives for Lower River Shannon SAC [IE0002165] Version 1.
- NPWS (2012) Conservation Objectives for Blackwater River (Cork/Waterford) SAC [IE0002170] Version 1.
- NPWS (2022) Conservation Objectives for Scohaboy (Sopwell) Bog SAC [IE0002206] Version 9.
- NPWS (2022) Conservation Objectives for Arragh More (Derrybreen) Bog SAC [IE0002207] Version 9.
- NPWS (2018) Conservation Objectives for Island Fen SAC [IE0002236] Version 1.
- NPWS (2019) Conservation Objectives for Lough Derg, North-East Shore SAC [IE0002241] Version 1.
- NPWS (2019) Conservation Objectives for Moanour Mountain SAC [IE0002257] Version 1.
- NPWS (2017) Conservation Objectives for Silvermines Mountains West SAC [IE0002258] Version 1.
- NPWS (2016) Conservation Objectives for Slieve Bernagh Bog SAC [IE0002312] Version 1.
- NPWS (2020) Conservation Objectives for Glendine Wood SAC [IE0002324] Version 1.
- NPWS (2016) Conservation Objectives for Coolrain Bog SAC [IE0002332] Version 1.
- NPWS (2016) Conservation Objectives for Knockacoller Bog SAC [IE0002333] Version 1.
- NPWS (2015) Conservation Objectives for Redwood Bog SAC [IE0002353] Version 1.
- NPWS (2015) Conservation Objectives for Ardgraigue Bog SAC [IE0002356] Version 1.
- NPWS (2012) Conservation Objectives for Dungarvan Harbour SPA [IE0004032] Version 1.
- NPWS (2022) Generic Conservation Objectives for Lough Derg (Shannon) SPA [IE0004058] Version 9.
- NPWS (2012) Conservation Objectives for River Shannon and River Fergus Estuaries SPA [IE0004077] Version 1.
- NPWS (2022) Generic Conservation Objectives for River Little Brosna Callows SPA [IE0004086] Version 9.
- NPWS (2022) Generic Conservation Objectives for Blackwater Callows SPA [IE0004094] Version 9.
- NPWS (2022) Generic Conservation Objectives for Middle Shannon Callows SPA [IE0004096] Version 9.
- NPWS (2022) Generic Conservation Objectives for River Suck Callows SPA [IE0004097] Version 9.
- NPWS (2022) Generic Conservation Objectives for All Saints Bog SPA [IE0004103] Version 9.
- NPWS (2022) Generic Conservation Objectives for Dovegrove Callows SPA [IE0004137] Version 9.
- NPWS (2022) Generic Conservation Objectives for Slieve Bloom Mountains SPA [IE0004160] Version 9.
- NPWS (2022) Generic Conservation Objectives for Slievefelim to Silvermines Mountains SPA [IE0004165] Version 9.
- NPWS (2022) Generic Conservation Objectives for Slieve Aughty Mountains SPA [IE0004168] Version 9.
- NPWS (2022) Generic Conservation Objectives for River Nore SPA [IE0004233] Version 9.
- NPWS (2012) Conservation Objectives for Blackwater Estuary SPA [IE0004028] Version 1.

The assessment considers available conservation objectives. Since conservation objectives focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process concentrated on assessing the potential effects of the LACAP against the QIs/SCIs of each site. The conservation objectives for each site were consulted throughout the assessment process.

3.3 Assessment Criteria and Screening

3.3.1 Is the LACAP Necessary to the Management of European Sites?

The overarching objective of the LACAP is not the nature conservation management of the sites, but to provide for coherent and coordinated approach to climate action within the County. Therefore, the LACAP is not considered to be directly connected with or necessary to the management of European sites.

3.3.2 Elements of the LACAP with Potential to Give Rise to Effects

The LACAP provides a framework for the sustainable development of the Council boundary area. There are a number of environmental sensitivities within the area and an assessment of effects indicates the potential effects relate to the following:

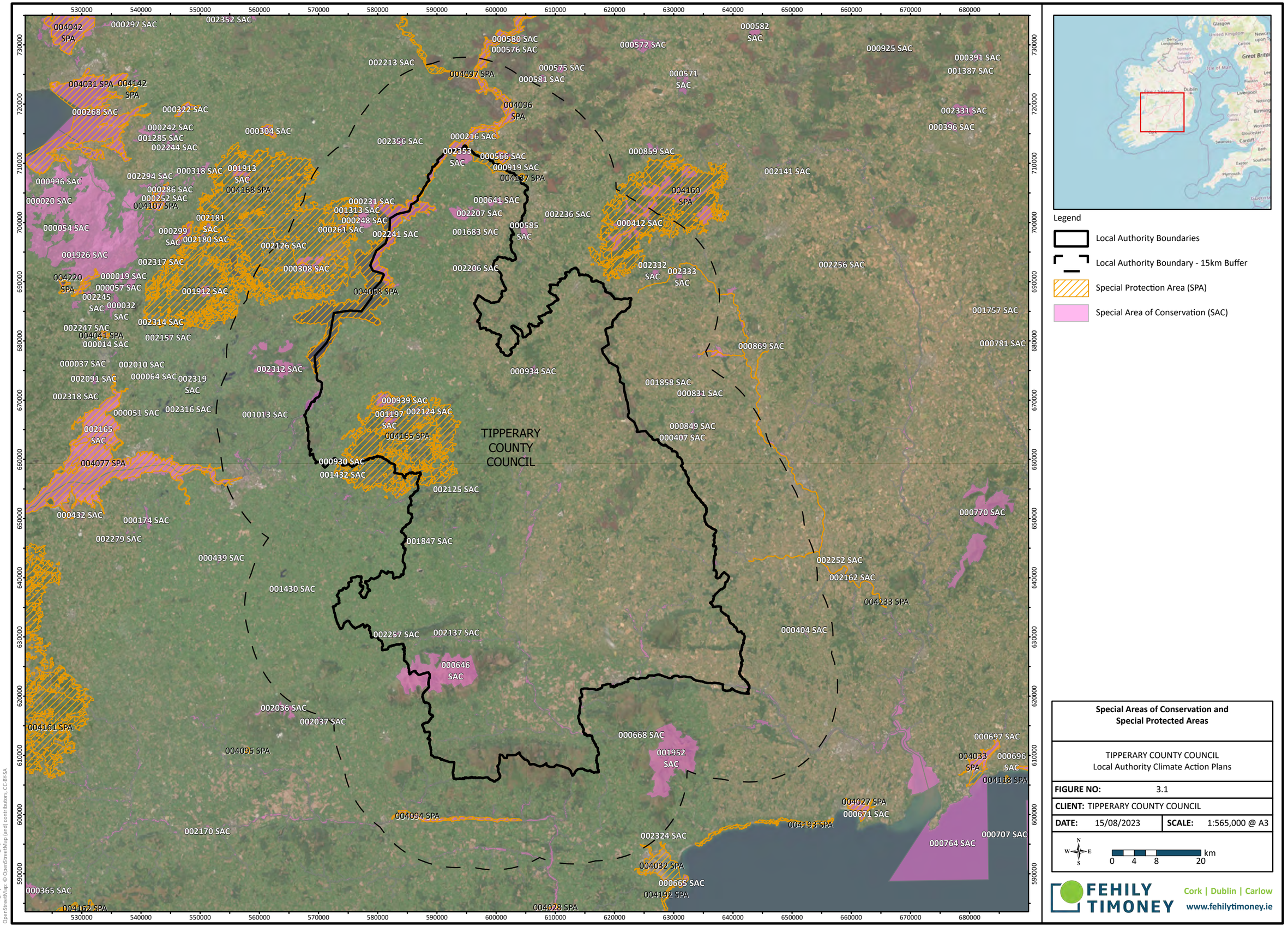
- *Arising from both construction and operation of development and associated infrastructure:*
  - *Loss of/damage to biodiversity in designated sites (including European sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;*
  - *Habitat loss, fragmentation and deterioration, including patch size and edge effects; and*
  - *Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species.*
- *Potential interactions if effects upon environmental vectors such as water and air;*
- *Adverse effects from tourism, amenity and recreation;*
- *Damage to the hydrogeological and ecological function of the soil resource;*
- *Adverse effects upon the status of water bodies arising from changes in quality, flow and/or morphology;*
- *Increase in the risk of flooding;*
- *Emissions to air including greenhouse gas emissions and other emissions.*

The elements of the LACAP with the highest potential to give rise to the effects indicated above are associated with construction phase elements of the implementation of the LACAP. The operational phase elements of the LACAP are consistent with the existing condition of the area. All policies and objectives are considered in this assessment with respect to the ecological integrity of each of the European sites identified. Considering the sensitivities/vulnerabilities of the QIs and SCIs in relation to all potential sources for effects and potential pathways for such effects. Where sources and pathways for effects are identified potential effects will be assessed in relation to the SSCOs.

3.3.3 Screening of Sites

Table 3.1 examines whether there is potential for effects on European sites considering information provided above, including Appendix 1. Sites are screened out based on one or a combination of the following criteria:

- The existence of potential for pathways for significant effects, such as hydrological links, LACAP proposals and the site to be screened;
- The distance of the relevant site from the LACAP boundary; and
- The existence of a link between identified threats or vulnerabilities at a site to potential impacts that may arise from the LACAP.



Legend

- Local Authority Boundaries
- Local Authority Boundary - 15km Buffer
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)

Special Areas of Conservation and Special Protected Areas

TIPPERARY COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	3.1		
CLIENT:	TIPPERARY COUNTY COUNCIL		
DATE:	15/08/2023	**SCALE:**	1:565,000 @ A3

N W E S

0 4 8 20 km

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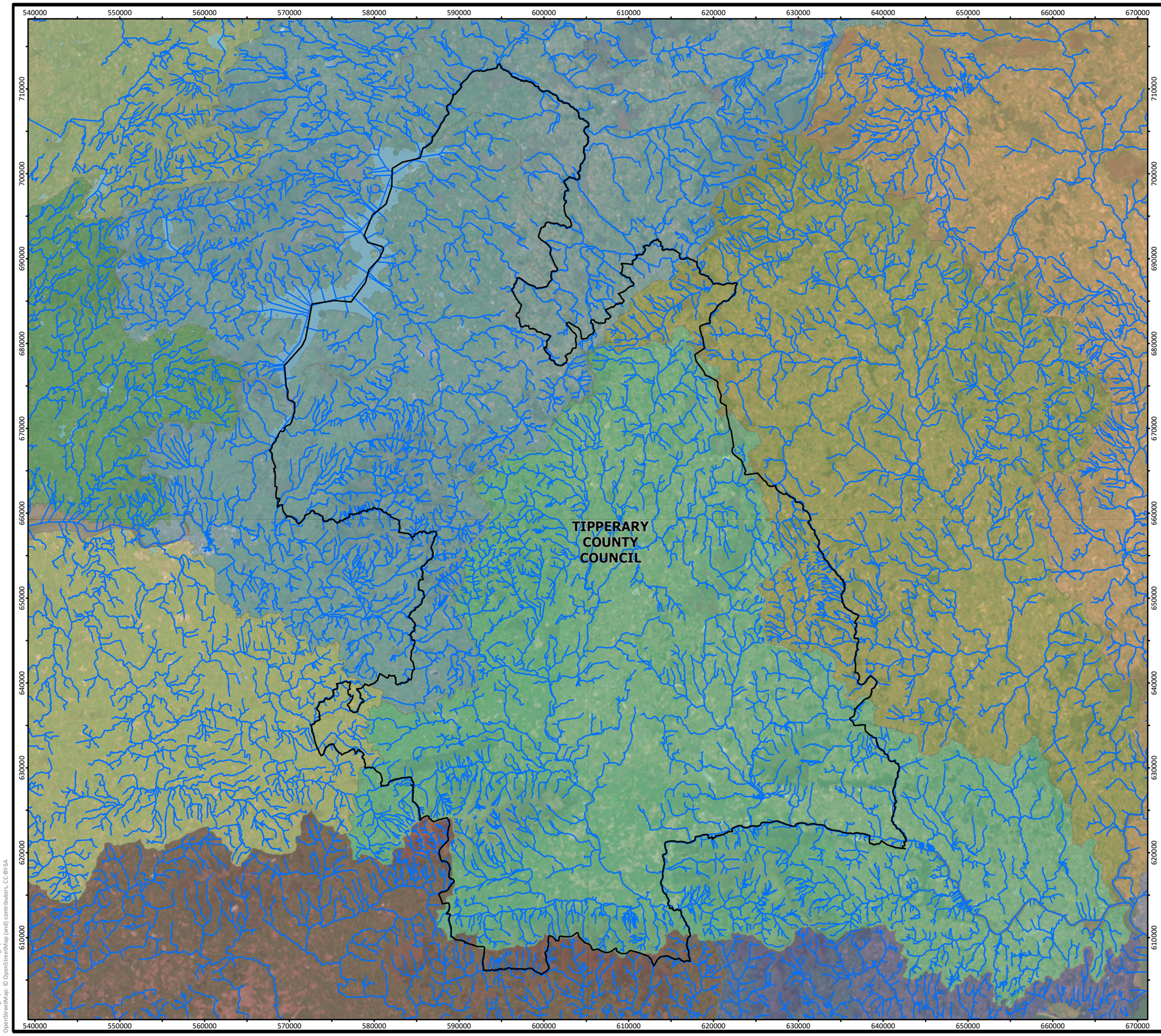

Legend

- Local Authority Boundaries
- Rivers

WFD Catchments

Catchment Name

- Ballyteigue-Bannow
- Barrow
- Blackwater (Munster)
- Colligan-Mahon
- Galway Bay South East
- Lower Shannon
- Nore
- Shannon Estuary North
- Shannon Estuary South
- Suir

Hydrology

TIPPERARY COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	3.2
CLIENT:	TIPPERARY COUNTY COUNCIL
DATE: 15/08/2023	**SCALE:** 1:440,000 @ A3

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0 3 6 10 km

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Table 3-1: Screening of European sites which have ecological pathways for potential effects

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000216	River Shannon Callows SAC	0	Limestone pavements [8240], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Otter (Lutra lutra) [1355], Alkaline fens [7230], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
000585	Sharavogue Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	This European Site is located immediately adjacent to the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc.,which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
000641	Ballyduff/Clonfinane Bog SAC	0	Depressions on peat substrates of the Rhynchosporion [7150], Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				hydrological interactions, land take, disturbance etc.,which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
000646	Galtee Mountains SAC	0	Siliceous rocky slopes with chasmophytic vegetation [8220], Northern Atlantic wet heaths with Erica tetralix [4010], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], Alpine and Boreal heaths [4060], Blanket bogs * if active bog [7130], Calcareous rocky slopes with chasmophytic vegetation [8210], European dry heaths [4030]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
000647	Kilcarren-Firville Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000930	Clare Glen SAC	0	Killarney fern (Trichomanes speciosum) [1421], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
000934	Kilduff, Devilsbit Mountain SAC	0	Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], European dry heaths [4030]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
000939	Silvermine Mountains SAC	0	Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Northern Atlantic wet heaths with Erica tetralix [4010]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
001197	Keeper Hill SAC	0	Blanket bogs * if active bog [7130], Northern Atlantic wet heaths with Erica tetralix [4010]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
001683	Liskeenan Fen SAC	0	Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
001847	Philipston Marsh SAC	0	Transition mires and quaking bogs [7140]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002124	Bolingbrook Hill SAC	0	European dry heaths [4030], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Northern Atlantic wet heaths with Erica tetralix [4010]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
002125	Anglesey Road SAC	0	Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002137	Lower River Suir SAC	0	Freshwater pearl mussel (Margaritifera margaritifera) [1029], White-clawed crayfish (Austropotamobius pallipes) [1092], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Atlantic salmon (Salmo salar) [1106], Sea lamprey (Petromyzon marinus) [1095], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Taxus baccata woods of the British Isles [91J0], Twaite shad (Alosa fallax) [1103], Otter (Lutra lutra) [1355], Brook lamprey (Lampetra planeri) [1096], Mediterranean salt meadows (Juncetalia maritimi) [1410], River lamprey (Lampetra fluviatilis) [1099], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
002162	River Barrow and River Nore SAC	0	Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], White-clawed crayfish (Austropotamobius pallipes) [1092], Killarney fern (Trichomanes speciosum) [1421], Salicornia and other annuals colonising mud and sand [1310], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0],	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			Mudflats and sandflats not covered by seawater at low tide [1140], Petrifying springs with tufa formation (Cratoneurion) [7220], Brook lamprey (Lampetra planeri) [1096], Mediterranean salt meadows (Juncetalia maritimi) [1410], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Twaite shad (Alosa fallax) [1103], Estuaries [1130], Sea lamprey (Petromyzon marinus) [1095], Atlantic salmon (Salmo salar) [1106], Desmoulin`s whorl snail (Vertigo moulinsiana) [1016], River lamprey (Lampetra fluviatilis) [1099], Nore Pearl Mussel (Margaritifera durrovensis) [1990], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], European dry heaths [4030], Otter (Lutra lutra) [1355], Reefs [1170], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002165	Lower River Shannon SAC	0	Otter (Lutra lutra) [1355], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Estuaries [1130], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Atlantic salmon (Salmo salar) [1106], Sea lamprey	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			(Petromyzon marinus) [1095], Reefs [1170], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Bottlenose dolphin (Tursiops truncatus) [1349], Sandbanks which are slightly covered by sea water all the time [1110], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Brook lamprey (Lampetra planeri) [1096], Large shallow inlets and bays [1160], Coastal lagoons [1150], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Mediterranean salt meadows (Juncetalia maritimi) [1410], Salicornia and other annuals colonising mud and sand [1310], River lamprey (Lampetra fluviatilis) [1099], Perennial vegetation of stony banks [1220], Mudflats and sandflats not covered by seawater at low tide [1140]	hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002170	Blackwater River (Cork/Waterford) SAC	0	Freshwater pearl mussel (Margaritifera margaritifera) [1029], River lamprey (Lampetra fluviatilis) [1099], White-clawed crayfish (Austropotamobius pallipes) [1092], Brook lamprey (Lampetra planeri) [1096], Perennial vegetation of stony banks [1220], Atlantic salmon (Salmo salar) [1106], Estuaries [1130], Otter (Lutra lutra) [1355], Mediterranean salt meadows (Juncetalia maritimi) [1410], Alluvial forests with Alnus glutinosa and Fraxinus	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Sea lamprey (Petromyzon marinus) [1095], Mudflats and sandflats not covered by seawater at low tide [1140], Twaite shad (Alosa fallax) [1103], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Killarney fern (Trichomanes speciosum) [1421], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Salicornia and other annuals colonising mud and sand [1310]	Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002206	Scohaboy (Sopwell) Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
002207	Arragh More (Derrybreen) Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002241	Lough Derg, North-East Shore SAC	0	Taxus baccata woods of the British Isles [91J0], Limestone pavements [8240], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Alkaline fens [7230], Juniperus communis formations on heaths or calcareous grasslands [5130]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
002257	Moanour Mountain SAC	0	European dry heaths [4030], Northern Atlantic wet heaths with Erica tetralix [4010]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002258	Silvermines Mountains West SAC	0	European dry heaths [4030], Calaminarian grasslands of the Violetalia calaminariae [6130], Northern Atlantic wet heaths with Erica tetralix [4010]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
002353	Redwood Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	This European Site is located within the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes
004058	Lough Derg (Shannon) SPA	0	Common tern (Sterna hirundo) [A193], Goldeneye (Bucephala clangula) [A067], Cormorant (Phalacrocorax carbo) [A017], Wetland and Waterbirds [A999], Tufted Duck (Aythya fuligula) [A061]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is potential for significant effects to this European Site and its Special Conservation Interests as a result of activities proposed under the LACAP.		
004086	River Little Brosna Callows SPA	0	Wetland and Waterbirds [A999], Black-headed Gull (Chroicocephalus ridibundus) [A179], Whooper Swan (Cygnus cygnus) [A038], Golden Plover (Pluvialis apricaria) [A140], Pintail (Anas acuta) [A054], Lapwing (Vanellus vanellus) [A142], Wigeon (Anas penelope) [A050], Teal (Anas crecca) [A052], Shoveler (Anas clypeata) [A056], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Black-tailed Godwit (Limosa limosa) [A156]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
004096	Middle Shannon Callows SPA	0	Golden Plover (Pluvialis apricaria) [A140], Black-tailed Godwit (Limosa limosa) [A156], Corncrake (Crex crex) [A122], Whooper Swan (Cygnus cygnus) [A038], Black-headed Gull (Chroicocephalus ridibundus) [A179], Wetland and Waterbirds [A999], Lapwing (Vanellus vanellus) [A142], Wigeon (Anas penelope) [A050]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
004137	Dovegrove Callows SPA	0	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	This European Site is located immediately adjacent to the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Special Conservation er the LACAP.		
004165	Slievefelim to Silvermines Mountains SPA	0	Hen harrier (Circus cyaneus) [A082]	This European Site overlaps with the area of the Tipperary LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is potential for significant effects to this European Site and its Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
000566	All Saints Bog and Esker SAC	0.39	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Bog woodland [91D0], Active raised bogs [7110]	This European Site is located within 500 m from the Dun Laoghaire Rathdown LACAP area. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. Thus, there is the potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004103	All Saints Bog SPA	0.39	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
004160	Slieve Bloom Mountains SPA	0.84	Hen harrier (Circus cyaneus) [A082]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
000919	Ridge Road, SW of Rapemills SAC	0.94	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	There is a separation distance of approximately 940 m between this European Site and the area of Tipperary LACAP.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
001432	Glenstal Wood SAC	1.13	Killarney fern (Trichomanes speciosum) [1421]	There is a separation distance of approximately 1.13 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
002312	Slieve Bernagh Bog SAC	1.21	Northern Atlantic wet heaths with Erica tetralix [4010], European dry heaths [4030], Blanket bogs * if active bog [7130]	There is a separation distance of approximately 1.21 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
000407	The Loughans SAC	2.32	Turloughs [3180]	There is a separation distance of approximately 2.32 km between this European Site and the area of Tipperary County LACAP and a potential groundwater connection is present. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
000248	Cloonmoylan Bog SAC	2.8	Depressions on peat substrates of the Rhynchosporion [7150], Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	There is a separation distance of approximately 2.8 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004168	Slieve Aughty Mountains SPA	2.85	Merlin (Falco columbarius) [A098], Hen harrier (Circus cyaneus) [A082]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
000231	Barroughter Bog SAC	3.04	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	There is a separation distance of approximately 3.04 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
002147	Lisduff Fen SAC	3.23	Petrifying springs with tufa formation (Cratoneurion) [7220], Geyer`s whorl snail (Vertigo geyeri) [1013], Alkaline fens [7230]	There is a separation distance of approximately 3.23 km between this European Site and the area of Tipperary County LACAP and a potential groundwater connection is present.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.		
000668	Nier Valley Woodlands SAC	3.43	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	There is a separation distance of approximately 3.43 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
004233	River Nore SPA	4.28	Kingfisher (Alcedo atthis) [A229]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.		
000849	Spahill and Clomantagh Hill SAC	4.49	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	There is a separation distance of approximately 4.49 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
001313	Rosturra Wood SAC	5.09	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	There is a separation distance of approximately 5.09 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002332	Coolrain Bog SAC	5.15	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	There is a separation distance of approximately 5.15 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
000412	Slieve Bloom Mountains SAC	5.5	Blanket bogs * if active bog [7130], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Northern Atlantic wet heaths with Erica tetralix [4010]	There is a separation distance of approximately 5.5 km between this European Site and the area of Tipperary County LACAP and no hydrological connection is present. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
001013	Glenomra Wood SAC	6.15	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	There is a separation distance of approximately 6.15 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002356	Ardgraigue Bog SAC	6.23	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	There is a separation distance of approximately 6.23 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
000261	Derrycrag Wood Nature Reserve SAC	6.29	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	There is a separation distance of approximately 6.29 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
000319	Pollnaknockaun Wood Nature Reserve SAC	6.66	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	There is a separation distance of approximately 6.66 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
004094	Blackwater Callows SPA	6.8	Whooper Swan (Cygnus cygnus) [A038], Wetland and Waterbirds [A999], Teal (Anas crecca) [A052], Wigeon (Anas penelope) [A050], Black-tailed Godwit (Limosa limosa) [A156]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002236	Island Fen SAC	6.99	Alkaline fens [7230], Juniperus communis formations on heaths or calcareous grasslands [5130]	There is a separation distance of approximately 6.99 km between this European Site and the area of Tipperary County LACAP and a potential groundwater connection is present. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
001430	Glen Bog SAC	7.17	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	There is a separation distance of approximately 7.17 km between this European Site and the area of Tipperary County LACAP and no hydrological connection is present. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
001858	Galmoy Fen SAC	7.17	Alkaline fens [7230]	There is a separation distance of approximately 7.17 km between this European Site and the area of Tipperary County LACAP and a potential groundwater connection is present.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.		
000308	Loughatorick South Bog SAC	7.27	Blanket bogs * if active bog [7130]	There is a separation distance of approximately 7.27 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
001952	Comeragh Mountains SAC	7.48	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Alpine and Boreal heaths [4060], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], Blanket bogs * if active bog [7130], Calcareous rocky slopes with chasmophytic vegetation [8210], Oligotrophic waters containing very few	There is a separation distance of approximately 7.48 km between this European Site and the area of Tipperary County LACAP and no hydrological connection is present. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			minerals of sandy plains (Littorelletalia uniflorae) [3110], Siliceous rocky slopes with chasmophytic vegetation [8220], Northern Atlantic wet heaths with Erica tetralix [4010], European dry heaths [4030], Slender green feather-moss (Hamatocaulis vernicosus) [6216]	At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002333	Knockacoller Bog SAC	8.21	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	There is a separation distance of approximately 8.21 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
000404	Hugginstown Fen SAC	9.6	Alkaline fens [7230]	There is a separation distance of approximately 9.6 km between this European Site and the area of Tipperary County LACAP and a potential groundwater connection is present. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.		
000831	Cullahill Mountain SAC	9.94	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	There is a separation distance of approximately 9.94 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
004097	River Suck Callows SPA	11.25	Lapwing (Vanellus vanellus) [A142], Golden Plover (Pluvialis apricaria) [A140], Wigeon (Anas penelope) [A050], Whooper Swan (Cygnus cygnus) [A038], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Wetland and Waterbirds [A999]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004077	River Shannon and River Fergus Estuaries SPA	12.02	Light-bellied Brent Goose (Branta bernicla hrota) [A046], Lapwing (Vanellus vanellus) [A142], Greenshank (Tringa nebularia) [A164], Teal (Anas crecca) [A052], Curlew (Numenius arquata) [A160], Grey Plover (Pluvialis squatarola) [A141], Cormorant (Phalacrocorax carbo) [A017], Wetland and Waterbirds [A999], Knot (Calidris canutus) [A143], Wigeon (Anas penelope) [A050], Ringed Plover (Charadrius hiaticula) [A137], Whooper Swan (Cygnus cygnus) [A038], Black-headed Gull (Chroicocephalus ridibundus) [A179], Shelduck (Tadorna tadorna) [A048], Dunlin (Calidris alpina) [A149], Scaup (Aythya marila) [A062], Golden Plover (Pluvialis apricaria) [A140], Pintail (Anas acuta) [A054], Redshank (Tringa totanus) [A162], Black-tailed Godwit (Limosa limosa) [A156], Bar-tailed Godwit (Limosa lapponica) [A157], Shoveler (Anas clypeata) [A056]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
002126	Pollagoona Bog SAC	13.84	Blanket bogs * if active bog [7130]	There is a separation distance of approximately 13.84 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
004032	Dungarvan Harbour SPA	14.1	Shelduck (Tadorna tadorna) [A048], Lapwing (Vanellus vanellus) [A142], Great Crested Grebe (Podiceps cristatus) [A005], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Dunlin (Calidris alpina) [A149], Wetland and Waterbirds [A999], Redshank (Tringa totanus) [A162], Turnstone (Arenaria interpres) [A169], Oystercatcher (Haematopus ostralegus) [A130], Golden Plover (Pluvialis apricaria) [A140], Knot (Calidris canutus) [A143], Bar-tailed Godwit (Limosa lapponica) [A157], Grey Plover (Pluvialis squatarola) [A141], Red-breasted Merganser (Mergus serrator) [A069], Black-tailed Godwit (Limosa limosa) [A156], Curlew (Numenius arquata) [A160]	This European Site is within 15km of the area of Dun Laoghaire Rathdown LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc.,which could affect European Sites. There is the potential for significant effects to the Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
000030	Danes Hole, Poulnalecka SAC	14.33	Lesser horseshoe bat (Rhinolophus hipposideros) [1303], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Caves do not open to the public [8310]	There is a separation distance of approximately 14.33 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites.	No	No

Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002324	Glendine Wood SAC	14.48	Killarney fern (Trichomanes speciosum) [1421]	There is a separation distance of approximately 14.48 km between this European Site and the area of Tipperary LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc.,which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No
004028	Blackwater Estuary SPA	21.83	Wigeon (Anas penelope) [A050], Golden Plover (Pluvialis apricaria) [A140], Lapwing (Vanellus vanellus) [A142], Dunlin (Calidris alpina) [A149], Black-tailed Godwit (Limosa limosa) [A156], Bar-tailed Godwit (Limosa lapponica) [A157], Curlew (Numenius arquata) [A160], Redshank (Tringa totanus) [A162], Wetland and Waterbirds [A999]	There is a separation distance of approximately 21.83 km between this European Site and the area of Tipperary County LACAP and a hydrological connection of 26.7 km (in-stream distance) is present. The LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc., which could affect European Sites. There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes

3.4 In-combination effects with Other Plans and Programmes

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 affect European sites. Appendix 2 outlines a selection of plans or projects that may interact with the Plan to cause in-combination effects to European sites. These plans, programmes, strategies etc. were considered throughout the assessment.

The LACAP sits within a hierarchy of statutory documents setting out public policy for, among other things, land use planning, infrastructure, sustainable development, recreation, environmental protection and environmental management, which have been subject to their own environmental assessment processes, as relevant. The Plan must comply with relevant higher-level strategic actions and will, in turn, guide lower level strategic actions.

The National Planning Framework (NPF) sets out Ireland's planning policy direction for the next 20 years. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSES for the Southern Region sets out objectives for land use planning, tourism, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the Draft LACAP. 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. Local authorities must be cognisant of this provision and forge a strong link between spatial planning and positive climate action ensuring that land-use planning and development integrates considerations of adaptation and mitigation.

In order to be realised, projects included in the LACAP (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework.

All projects within the LACAP area and receiving environment will be considered in combination with any and all lower tier projects that may arise due to the implementation of the LACAP. Given the uncertainties that exist with regard to the scale and location of developments facilitated by the LACAP, it is recognised that the identification of in-combination effects is limited, and that the assessment of in-combination effects will need to be undertaken in a more comprehensive manner at the project-level.

Additional information on the in-combination effects relationship with other plans and programmes is provided at Appendix 2.

3.5 AA Screening Conclusion

The effects that could arise from the LACAP have been examined in the context of several factors that could potentially affect the integrity of any European site. On the basis of the findings of this Screening for AA, it is concluded that the LACAP:

- Is not directly connected with or necessary to the management of any European site; and
- May, if unmitigated, have significant adverse effects on 43 (no.) European sites.

Therefore, a Stage 2 AA is required for the LACAP (see Section 4 of this report). An AA Screening Determination undertaken by the planning authority accompanies this report and the LACAP.

4. STAGE 2 APPROPRIATE ASSESSMENT

4.1 Introduction

The Stage 2 AA assesses whether the LACAP alone, or in-combination with other plans, programmes, and/or projects, would result in adverse effects on the integrity of the 43 European sites brought forward from screening (those considered on Table 3-1 for which there is "Potential Pathway for Significant Effects" and/or "Potential for In-Combination Effects"), with respect to site structure, function and/or conservation objectives.

4.2 Characterisation of European sites Potentially Affected

The AA Screening identified 43 European sites with pathway receptors for potential effects arising from the implementation of the LACAP. Appendix 1 characterises each of the qualifying features of the ALL European sites brought forward from Stage 1 in context of each of the sites' vulnerabilities. Each of these site characterisations were taken from the NPWS website[7].

4.3 Identifying and Characterising Potential Significant Effects

The following parameters can be used when characterising impacts[8]:

- Direct and Indirect Impacts - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.
- Magnitude - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- Extent - The area over that the impact occurs – this should be predicted in a quantified manner.
- Duration - The time that 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.

[7] Last accessed 17th July 2023; https://www.npws.ie/protected-sites

[8] These descriptions are informed by publications including: Chartered Institute of Ecology and Environmental Management (2016) "Guidelines for ecological impact assessment"; Environmental Protection Agency (2002) "Guidelines on the Information to be contained in Environmental Impact Statements"; and National Roads Authority (2009) "Guidelines for Assessment of Ecological Impacts of National Roads Schemes".

- Ecologically Significant Impact - 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.
- Integrity of a Site - 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.

Site-Specific Conservation Objectives (SSCOs) have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes that 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 Objective for SACs:

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

One generic Conservation Objective for SPAs:

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

4.3.1 Types of Potential Effects

Assessment of potential effects on European sites is conducted utilising a standard source-pathway model (see approach referred to under Sections 1.3 and 3). The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site: loss/reduction of habitat area; habitat or species fragmentation; disturbance to key species; reduction in species density; changes in key indicators of conservation value (water quality etc.); and climate change. Each of these potential changes are considered below and in Table 4.1 with reference to the QIs/SCIs of all of the European sites brought forward from Stage 1 of the AA process (see Section 3).

4.3.1.1 Loss/Reduction of Habitat Area

The LACAP provides for action related to climate action and generally seeks to reduce CO2 emissions through coordination, advocacy, awareness etc. Many of the actions also relate to land use change or the provision of infrastructure developments such as green energy and active travel projects. The exact spatial location of these projects is not fully developed within the plan. The development of all infrastructural have associated construction phase effects which include land take, habitat destruction, disturbance effects, light pollution, dust, hydrological interactions, airborne pollution, excessive noise etc. Therefore, mitigation measures are required to ensure that there are no significant adverse effects due to construction on the ecological integrity of any European site.

As identified above LACAP boundary has several European sites within it; therefore, there is potential for effects to European sites through urbanisation and direct habitat loss on foot of the implementation of the LACAP; however, several mitigation measures have been integrated into the Draft LACAP to ensure that its implementation will not result in the loss of any habitat necessary for the ecological integrity of any European site; namely list of actions to avoid habitat loss 2.3[9], 5.5[10], 5.6[11] and 5.8[12] etc. Additionally, the environmental governance section of the LACAP sets out a number of measures which will ensure the protection of biodiversity throughout the implementation of the plan such as:

- Promote climate action projects that support and maximize environmental co-benefits, such as biodiversity protection and enhancement; improved air, water or soil quality; or enhanced recreation, amenity and cultural heritage value, to ensure win-win benefits are gained.
- Support or facilitate climate action related projects and initiatives which seek to make improvements in soil structure, management and health by increasing soil organic carbon - which will create the environmental co-benefits of improving flood resilience by enhancing water holding capacity of soils and increasing the level of GHG sequestration associated with land use functions.
- Ensure all development underpinned or supported by climate action is planned and implemented in a manner that appropriately considers the potential for environmental co-benefits, potential environmental impacts and environmental protection requirements. No climate action related development project that is likely to have a significant negative effects on the receiving environment shall be supported.
- Ensure climate action related projects are carried out in a manner that promotes climate action-cultural heritage co-benefits, and do not result in unauthorized physical damage to cultural, archaeological or architectural features, or unauthorized or inappropriate alteration of the context of sensitive cultural heritage features.

[9] Carry out an Ecological/Habitat audit of local authority owned land, in accordance with an agreed methodology, to identify areas suitable for restoration and enhanced carbon storage though tree-planting and biodiversity measures, having due regard to the need to conserve and enhance protected species, biodiversity and European sites on or connected to local authority lands.

[10] Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity levels in keeping with the 'All Ireland Pollinator Plan', and as part of this to develop and implement a pesticide reduction policy for lands and areas managed by the Council - 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.

[11] Prepare a guidance document and training on the importance of, quality rating and sustainable management of the hedgerows of Tipperary, for Council staff and external stakeholders including farmers/landowners.

[12] Building on the 'Tipperary County Wetland Survey', develop a Wetland Restoration Plan, this shall identify priority areas for habitat restoration, carbon capture and biodiversity benefits, along with phasing for restoration, having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive.

- Ensure climate action related projects are carried out in a manner that promotes climate action water quality co-benefits and align with the provisions of the Water Framework Directive and relevant River Basin Management Plan.
- Promote climate action projects that support protected trees, hedgerows and other habitats such as wetlands, flood zones which contribute to green infrastructure.
- Support opportunities to improve ecological connectivity of non-designated habitats and sites to improve overall ecosystem resilience and functioning while supporting climate action within the county.
- Ensure all projects supported by the council have taken the necessary precautions to identify and manage invasive species, particularly with regard to Schedule III species. No climate action related development project that is likely to cause the spread of invasive species listed in Schedule III shall be supported.
- Support opportunities to support peatland restoration, rehabilitation and maintenance while achieving climate targets through the implementation of the climate actions within the plan.
- These policies ensure that there will be no loss of habitat or supporting habitat for species that are necessary to maintain the ecological integrity of European sites throughout the lifetime of the plan.
- Flood defense projects, or related maintenance works, shall be carried out in a manner that promotes climate action-biodiversity related co-benefits, and shall have due regard for the protection and enhancement of rare, protected or important habitats and species.

These policies ensure that there will be no loss of habitat or supporting habitat for species that are necessary to maintain the ecological integrity of European sites throughout the lifetime of the plan.

4.3.1.2 Habitat or species Fragmentation

As previously stated, the LACAP provides for infrastructure developments which have associated effects. These effects could result in the fragmentation of habitat and or species through light pollution, habitat loss, removal of stepping stone habitats etc. This is particularly relevant for linear projects such as active travel schemes. Therefore, mitigation measures are required to ensure that there are no significant adverse effects in relation to fragmentation on the ecological integrity of any European site.

The LACAP recognises the role of non-designated sites for the maintenance and enhancement of European sites due to the connectivity and accessibility of ecological resources. The LACAP provides actions to minimise potential fragmentation and to facilitate the enhancement of ecological corridors such as hedgerows; mitigation measures such as 5.6[11] (see full list of measures reproduced at Section 5 of this report). Lighting is a particular issue for biodiversity - particularly with regard to linear projects, therefore the following action was required to ensure there would be no significant impacts in this regard: 3.3[13].

Further to these provisions there are actions related to specific ecological resources and/or habitats such as waterways, wetlands and peatlands etc. These actions apply to all plans, programmes and/or projects that may arise due to the implementation of the LACAP and will ensure that habitat or species fragmentation will not occur in relation to the connectivity of the ecological resources necessary to maintain the ecological integrity of European sites throughout the lifetime of the LACAP.

[13] Deliver the Tipperary Public Lighting Energy Efficiency Project while ensuring potential actions maintain/control or reduce existing lumen levels and spectral range to avoid effects on biodiversity.

4.3.1.3 Disturbance to Key Species

Disturbance effects are cause by any activity that has potential to alter the movement patterns/distribution of species. Disturbance effects can relate to direct disturbance through human activity/movement or noise pollution. This is particularly relevant in relation to tourism and recreation in general, which could be influenced by the LACAP due to the provision of active travel schemes and other green initiatives within the LACAP; from the perspective that many of the tourism destinations or attractions in the area are in or adjacent to European sites.

The LACAP accounts for noise pollution effects through its policies and objectives affording protection to European sites by ensuring any projects that arise from the implementation of the LACAP avoid or minimise noise in compliance with the Environmental Noise Directive and associated National Regulations through the Tipperary County Council Noise Action Plan 2018 - 2023. Actions to ensure the protection of habitat quality with respect to disturbance effects from noise and other sources have been built into the LACAP; namely 1.8[14], 1.9[15], 3.5[16], 3.7[17] and 3.8[18] etc. (further details see Section 5).

These measures are robust to ensure that any sensitive habitat features, or species will be identified, and only compliant applications will be granted. All of the policies related to positive effects for Biodiversity are detailed in Section 5.

[14] Participate in the 'Smarter Travel Programme' (NTA) to encourage sustainable and active travel by staff to and from their work locations and during the course of their work.

[15] Advocate for, and apply a review and update of national Staff Travel and Subsistence Rates to incentivise the use of lower carbon vehicles/car-pooling/transport modes to reduce transport costs/emissions for staff and provide a more conducive working environment by reducing travel for work need.

[16] Develop an Electric Vehicle Strategy for Tipperary and commence implementation of the actions/recommendations/targets as identified; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality etc.

[17] Continue to roll-out the Council's Active Travel Programme maximising available funding from the NTA, having appropriate regard to environmental sensitivities such as traffic and transport constraints and aspects, European sites and biodiversity.

[18] Carry out an assessment for the delivery of 'car-restricted zones' with reallocation of space, in certain suitable areas i.e. town centres, schools etc where the focus should be on active travel, business and amenity, as appropriate, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.

4.3.1.4 Reduction in species density

Species densities are reliant on species distributions, habitat condition, connectivity of ecological resources and availability of resources such as prey/food. The LACAP introduces potential sources for effects to affect these four determinant factors for species densities in the form of construction phase effects such as habitat destruction, visitor movements/access, hydrological interaction or operational effects such as disturbance effects, habitat encroachment, trampling etc. However, the LACAP contains provisions to enhance biodiversity, landscape and the environment within Council boundary 2.3[9], 2.4[19], 4.8[20], 5.5[10], 5.6[11] and 5.8[12] etc. Similarly, the LACAP the role of non-designated sites for the maintenance and enhancement of European sites due to the connectivity and accessibility of ecological resources. Further to these provisions there are actions related to specific ecological resources and/or habitats such as 2.3[9], 2.4[19], 5.5[10], 5.6[11] and 5.8[12] etc. These actions apply to all plans, programmes and projects that may arise due to the implementation of the plan. Measures relating to light pollution, noise pollution, habitat loss and fragmentation are addressed above (further detailed in Section 5).

In addition to this the LACAP identifies actions to protect and improve water quality interactions (see below for further details) which can influence species densities. There are also a number of provisions relating to protective buffer zones, further assessment requirements as well as commitments to increasing water quality standards etc. These measures are detailed across theLACAP.

[19] Carry out a 'Tree Cover Survey and Policy' on lands managed by the local authority, in accordance with an agreed methodology. The study will identify sites for large scale native and mixed woodland planting and set targets for planting and maintaining native trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation.

[20] Facilitate, advocate for and support the agriculture sector in meeting their own emissions reductions targets and in achieving energy in agriculture, farm diversification and smart climate land use

4.3.1.5 Changes of Indicators of Conservation Value

Water quality is the primary macro indicator of conservation value. The LACAP contains many robust actions to ensure the protection of both surface and ground water quality. Development within the vicinity of groundwater or surface water dependant European sites will not be permitted where there is potential for a likely significant effect on the groundwater or surface water supply to the European sites. Action that specifically relate to the protection of water quality which account for potential effects to European sites include 3.1[21], 5.4[22], 5.5[10], 5.8[12], 6.11[23] and 9.2[24] etc. Similarly, emissions to air have potential to adversely affect the conservation status of European sites; however, the LACAP contains actions – such as 1.8[14], 1.9[15], 1.10[25], 3.1[21], 3.7[17], 3.8[18] and 8.5[26] etc. – which account for this.

Additionally, the actions provide broader scope to ensure the protection of the wider landscape associated with riparian zones and habitats sensitive to hydrological interactions; such as 5.5[10] and 5.8[12].

[21] Prepare and implement a pipeline of projects and initiatives for Local Authority Buildings/Facilities to assist in achieving a 51% reduction in non-electrical building emissions (thermal) by 2030 and to improve adaptation to climate change. Programme to include (at the minimum) for the following:

i. Agreed schedule of buildings to be upgraded with phasing and costing.

ii. Rainwater collection/water conservation measures

iii. Nature based solutions

iv .Renewable Energy technologies

v .Lifecycle analysis/Green Public procurement

vi. Consideration of specialist building requirements i.e. HVAC in Museum, fire training services etc.

vii. Consider use of emerging technologies and materials

Due regard shall be had to relevant planning and environmental protection criteria, including the need to protect European sites, when implementing this action.

[22] Carry out a review of Section 4 Discharge to Water licenses determine if they are capable of meeting projected climate change related risks such as hydrological changes and water temperature increases, etc.

[23] Support and inform a climate proofing programme for natural water resources, and to better manage flooding at the catchment level, the Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk. A study will be commissioned for this sub-catchment to:

i.Identify the reasons why Water Framework Directive water quality objectives are not being met,

ii.Set out baseline water quality standards to enable monitoring,

iii.Identify solutions (incl nature based) to reducing flood risk at the catchment level, and,

iv.Set out viable, positive and collaborative mechanisms at the community level for how they can be delivered.

The programme shall have due regard to the protection of biodiversity and European sites and avoidance of habitat fragmentation.

[24] Resolve local flooding issues utilising OPW and Department of Transport funding (Drainage programme, Climate Adaptation and Resilience Works, OPW Minor Works Scheme and Nature Based Solutions, having due regard to the protection of biodiversity and European sites and avoidance of habitat fragmentation.

[25] Continue to show leadership and support for hybrid working for staff as an enabler of a reduced need to travel to work with associated GHG emissions savings and provide infrastructure to facilitate remote working/video conferencing.

[26] Develop a protocol for and to commence air quality monitoring in each of the Key Towns to determine the quality of air at key locations in towns

4.3.1.6 Climate change

The LACAP is specifically focused on climate action and most of the actions within the plan are aimed at reducing carbon emissions and move towards renewable energy sources; 1.3[27], 1.6[28], 1.9[15], 1.13[29], 3.2[30], 3.4[31] and 8.2[32] etc.

Therefore, there are no sources for significant effects to climate change factors identified within the LACAP having regard for the measures identified above and in Section 5 below. Therefore, there are no changes projected to arise from climate change to the degree that it would affect the QIs, or SCIs of the European sites considered.

[27] P Prepare and apply a project design stage checklist to enable and demonstrate 'Climate Proofing' of local (local authority-led) capital projects, for example; projects funded under the 'Outdoor Recreation Scheme', 'Active Travel Scheme', 'Urban Regeneration and Development Fund' etc. The intention will be to help guide the incorporation of climate actions such as biodiversity enhancement, carbon capture, walking and cycling, public transport, nature-based solutions, urban greening, rainwater harvesting, renewable energy technology, infrastructure for zero emission vehicles at project design stage etc. Significant cross-boundary projects that are already subject to Climate Change Appraisal are not subject to this process.

[28] Examine the amount and extent of data being held in order to drive down capacity requirements for on-site & off-site storage (in both hard-copy & electronic formats). Seek to implement measures for more efficient data storage.

[29] Seek to acquire the Council's electricity supply from "green/renewable" sources (with provision for required alternative back-up in place)

[30] Prepare and implement a pipeline of projects and initiatives for Council Fleet and Transport Management operations to assist in achieving a 51% reduction in non-electrical transport greenhouse gas emissions by 2030 and to adapt to climate change. Programme of measures to include (at the minimum) for the following:

i. Review of driver behaviour

ii. Education and training programme for Fleet Vehicle Drivers

iii. Review of fuel procurement procedures

iv. Move to alternative vehicles, including EV, and alternative fuel types including HVO.

v. Optimisation of road works programme

vi. Continue the exploration of acquiring more carbon efficient large vehicles

vii.Consider use of emerging technologies and materials

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.

[31] Participate/lead in national/regional funding programmes for local authorities, for example, the SEAI Energy Retrofit 'Pathfinder' funding programme etc, to support funding for emissions reductions measures; All retrofitting and maintenance works will prioritise energy efficiencies, segregated waste facilities, renewable energy generation (solar PV, geothermal and micro wind generation where feasible), and mobility options (shared bikes, micro mobility and EV charging); having due regard to environmental sensitivities such as European sites and biodiversity etc.

[32] Promote the use of Broadband Connection Point (BCPs) hubs for interagency meetings, to reduce the need for travelling by stakeholders by providing an alternative to standard meeting formats.

Table 4-1: Characterisation of Potential Effects arising from the subject land area

Site Code	Site Name	Characterisation of Potential Effects
000216	River Shannon Callows SAC	The known threats and pressures of this SAC relate to agriculture, infrastructure, direct interaction with species and populations, recreation, flooding, land use change, land use management, hydrological interactions, waste management, mining/ resource extraction, and forestry. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000585	Sharavogue Bog SAC	The known threats and pressures of this SAC relate to forestry, hydrological interactions, problematic native species, agriculture, and burning. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000641	Ballyduff/Clonfinane Bog SAC	The known threats and pressures of this SAC relate to agriculture, mining/ resource extraction, burning and infrastructure. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.

Site Code	Site Name	Characterisation of Potential Effects
000646	Galtee Mountains SAC	The known threats and pressures of this SAC relate to land use change, land use management, recreation, burning, agriculture, hydrological interactions, and waste management. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000647	Kilcarren-Firville Bog SAC	The known threats and pressures of this SAC relate to agriculture, mining/ resource extraction, forestry, infrastructure, and burning. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000930	Clare Glen SAC	The known threats and pressures of this SAC relate to hydrological interactions, forestry, recreation, succession, land use management. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000934	Kilduff, Devilsbit Mountain SAC	The known threats and pressures of this SAC relate to waste management, recreation, agriculture, and direct interaction with species and populations. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.

Site Code	Site Name	Characterisation of Potential Effects
000939	Silvermine Mountains SAC	The known threats and pressures of this SAC relate to land use management, land use change, and agriculture. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
001197	Keeper Hill SAC	The known threats and pressures of this SAC relate to infrastructure, recreation, transport, and erosion. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
001683	Liskeenan Fen SAC	The known threats and pressures of this SAC relate to agriculture, invasive species, and mining/ resource extraction. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
001847	Philipston Marsh SAC	The known threats and pressures of this SAC relate to agriculture and forestry. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.

Site Code	Site Name	Characterisation of Potential Effects
002124	Bolingbrook Hill SAC	The known threats and pressures of this SAC relate to land use management, land use change, forestry, burning, infrastructure, and poor conservation management. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002125	Anglesey Road SAC	The known threats and pressures of this SAC relate to agriculture and forestry. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002137	Lower River Suir SAC	The known threats and pressures of this SAC relate to agriculture, waste management, invasive species, hydrological interactions, forestry, land use change, flooding, infrastructure, land use management, and commercial shipping. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002162	River Barrow and River Nore SAC	The known threats and pressures of this SAC relate to agriculture, hydrological interactions, waste management, changes in abiotic conditions, infrastructure, flooding, land use management, forestry, mining/ resource extraction, direct interaction with species and populations, recreation, commercial shipping, aquaculture, invasive species, and erosion. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.

Site Code	Site Name	Characterisation of Potential Effects
002165	Lower River Shannon SAC	The known threats and pressures of this SAC relate to infrastructure, land use management, land use change, waste management, agriculture, forestry, mining/ resource extraction, recreation, direct interaction with species and populations, aquaculture, invasive species, and hydrological interactions. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002170	Blackwater River (Cork/Waterford) SAC	The known threats and pressures of this SAC relate to invasive species, waste management, land use change, land use management, infrastructure, agriculture, mining/ resource extraction, recreation, erosion, and forestry. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002206	Scohaboy (Sopwell) Bog SAC	The known threats and pressures of this SAC relate to burning, succession, hydrological interactions, mining/ resource extraction, waste management, land use change, land use management, forestry and invasive species. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002207	Arragh More (Derrybreen) Bog SAC	The known threats and pressures of this SAC relate to hydrological interactions, invasive species, succession, forestry, waste management, land use change, land use management, mining/ resource extraction, and burning. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc.

Site Code	Site Name	Characterisation of Potential Effects
		Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002241	Lough Derg, North-East Shore SAC	The known threats and pressures of this SAC relate to hydrological interactions, agriculture, commercial shipping, infrastructure, waste management, invasive species, changes in abiotic conditions, land use change, land use management, succession, recreation, flooding, and forestry. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002257	Moanour Mountain SAC	The known threats and pressures of this SAC relate to forestry, recreation, and agriculture. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002258	Silvermines Mountains West SAC	The known threats and pressures of this SAC relate to mining/ resource extraction, recreation, agriculture, infrastructure, transport, and burning. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002353	Redwood Bog SAC	The known threats and pressures of this SAC relate to agriculture, infrastructure, burning, and mining/ resource extraction. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc.

Site Code	Site Name	Characterisation of Potential Effects
		Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004058	Lough Derg (Shannon) SPA	The known threats and pressures of this SPA relate to recreation, direct interaction with species and populations, and agriculture. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004086	River Little Brosna Callows SPA	The known threats and pressures of this SPA relate to infrastructure, agriculture, recreation, direct interaction with species and populations, land use management, and land use change. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004096	Middle Shannon Callows SPA	The known threats and pressures of this SPA relate to agriculture, recreation, land use management, direct interaction with species and populations, and infrastructure. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004103	All Saints Bog SPA	The known threats and pressures of this SPA relate to land use management, land use change, direct interaction with species and populations, agriculture, forestry, infrastructure, mining/ resource extraction, and burning. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc.

Site Code	Site Name	Characterisation of Potential Effects
		Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000566	All Saints Bog and Esker SAC	The known threats and pressures of this SAC relate to land use management, waste management, agriculture, hydrological interactions, agriculture, burning, and mining/ resource extraction. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004137	Dovegrove Callows SPA	The known threats and pressures of this SPA relate to agriculture. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004165	Slievefelim to Silvermines Mountains SPA	The known threats and pressures of this SPA relate to mining/ resource extraction, land use management, land use change, forestry, infrastructure, and agriculture. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004160	Slieve Bloom Mountains SPA	The known threats and pressures of this SPA relate to land use management, land use change, infrastructure, forestry, agriculture, and mining/ resource extraction. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc.

Site Code	Site Name	Characterisation of Potential Effects
		Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000407	The Loughans SAC	The known threats and pressures of this SAC relate to agriculture. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004168	Slieve Aughty Mountains SPA	The known threats and pressures of this SPA relate to forestry, agriculture, infrastructure, land use management, land use change, and mining/ resource extraction. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002147	Lisduff Fen SAC	The known threats and pressures of this SAC relate to mining/ resource extraction, agriculture, land use management, land use change, and waste management. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004233	River Nore SPA	The known threats and pressures of this SPA relate to commercial shipping, waste management, land use management, and land use change. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc.

Site Code	Site Name	Characterisation of Potential Effects
		Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004094	Blackwater Callows SPA	The known threats and pressures of this SPA relate to agriculture, land use management, infrastructure, and recreation. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
002236	Island Fen SAC	The known threats and pressures of this SAC relate to direct interaction with species and populations, burning, land use management, infrastructure, succession, mining/ resource extraction, and agriculture. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
001858	Galmoy Fen SAC	The known threats and pressures of this SAC relate to mining/ resource extraction, agriculture, and forestry. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
000404	Hugginstown Fen SAC	The known threats and pressures of this SAC relate to agriculture and forestry. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.

Site Code	Site Name	Characterisation of Potential Effects
004097	River Suck Callows SPA	The known threats and pressures of this SPA relate to land use management, land use change, agriculture, recreation, forestry, and direct interaction with species and populations. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004077	River Shannon and River Fergus Estuaries SPA	The known threats and pressures of this SPA relate to commercial shipping, recreation, land use management, agriculture, aquaculture, and infrastructure. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004032	Dungarvan Harbour SPA	The known threats and pressures of this SPA relate to agriculture, land use management, recreation, aquaculture, and recreation. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.
004028	Blackwater Estuary SPA	The known threats and pressures of this SPA relate to infrastructure, direct interaction with species and populations, land use management, agriculture, and recreation. The LACAP provides for actions related to climate action which seek to coordinate and facilitate a reduction in carbon emissions. Some of the actions support the development of infrastructure which could result in effect to European sites such as land take, hydrological interactions, alterations to land use etc. Therefore, mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below.

5. MITIGATION MEASURES

This section outlines measures that have been incorporated into the LACAP in order to mitigate against potential effects to European sites as identified above. The LACAP was prepared in an iterative manner whereby the Plan and AA documents have informed subsequent versions of the other. These mitigation measures ensure that there will be no significant effects to the ecological integrity of any European site from implementation of the LACAP. The mitigation measures most relevant to the protection of European sites are identified in Table 5-1 and Table 5-2 below.[33] Some of these measures, many of which were integrated into the current Plan through the SEA and AA processes for that Plan, have been retained and/or updated.

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

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

Additional text clarifying environmental protection related obligations and environmental enhancement opportunities has been attached to a variety of defined actions in the plan (as seen in Table 5-1). This text has been shaped to ensure that environmental considerations are appropriately taken into account during plan implementation. This text has also been shaped to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects.

Several environmental governance principles were established to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects (as seen in Table 5-2). These environmental governance principles shall underpin and guide plan implementation and shall apply to and be integrated into all actions/activities which result due to the implementation of the plan.

Mitigation measures within the Local Authority Climate Action Plan which did not require additional text (embedded mitigation) are presented in Table 5-3.

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

[33] For a complete assessment of the Plan, against all environmental components (These components comprise biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors), refer to the Strategic Environmental Assessment (SEA) Environmental Report.

Table 5-1: Recommendations integrated into the Plan

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
2.3	Carry out an Ecological/Habitat audit of local authority owned land, in accordance with an agreed methodology, to identify areas suitable for restoration and enhanced carbon storage though tree-planting and biodiversity measures.	This is a study related action that will have no real environmental effect when considered in isolation. Depending on the outcome of the study, it has the potential to create some environmental benefits such as the reduction of GHG emissions. In the absence of mitigation, the carrying out of inappropriate restoration works or measures supported by this action could potentially lead to negative environmental effects on biodiversity, flora and fauna or water quality.	Carry out an Ecological/Habitat audit of local authority owned land, in accordance with an agreed methodology, to identify areas suitable for restoration and enhanced carbon storage though tree-planting and biodiversity measures, having due regard to the need to conserve and enhance protected species, biodiversity and European sites on or connected to local authority lands.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.1	Prepare and implement a pipeline of projects and initiatives for Local Authority **Buildings/Facilities** to assist in achieving a 51% reduction in non-electrical building emissions (thermal) by 2030. Programme to include (at the minimum) for the following: i. Building Stock Plans ii. Prepare Buildings for 2050 in so far as practical (Net Zero Emissions) iii. Energy Efficiency Projects iv. 'Reduce Your Use' initiatives (see Action 1.15) v. Renewable Energy Technologies vi. Lifecycle analysis/Green Public Procurement vii. Consideration of specialist building requirements i.e. HVAC in Museum, fire training services etc. viii. Consider use of emerging technologies and materials Note: See related Action 5.3 Nature-based solutions and integrated rainwater management protocol	This action will support the local authority in reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets. This action has the potential to contribute to the creation of slight to significant positive environmental effects on climate, biodiversity, water quality and hydrology, and local air quality. The development of nature based solutions as part of projects has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. The action will also promote the reduction of lifecycle GHG emissions in buildings and infrastructure generally. Development supported by this action, such as renewable energy or drainage related development could potentially have negative environmental effects, including impacts on water quality or hydrology, biodiversity and protected sites.	Prepare and implement a pipeline of projects and initiatives for Local Authority Buildings/Facilities to assist in achieving a 51% reduction in non-electrical building emissions (thermal) by 2030 and to improve adaptation to climate change. Programme to include (at the minimum) for the following: Agreed schedule of buildings to be upgraded with phasing and costing. Renewable Energy technologies Lifecycle analysis/Green Public procurement Consideration of specialist building requirements i.e. HVAC in Museum, fire training services etc. Consider use of emerging technologies and materials Due regard shall be had to relevant planning and environmental protection criteria, including the need to protect European sites, when implementing this action.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.2	Prepare and implement a pipeline of projects and initiatives for Council **Fleet and Transport Management** operations to assist in achieving a 51% reduction in non-electrical transport greenhouse gas emissions by 2030. Programme of measures to include (at the minimum) for the following: • Prepare a 'Fleet Decarbonisation Roadmap' • Review of driver behaviour • Education and training programme for Fleet Vehicle Drivers • Review of fuel procurement procedures • Move to alterative vehicles, including EV, and alternative fuel types including HVO. • Optimisation of road works programme • Continue the exploration of acquiring more carbon efficient large vehicles • Consider use of emerging technologies and materials • Ensure that alternative fuel sources are sustainably sourced and appropriate end-of-life management practices are in place for Electric Vehicles.	This action will support the local authority in reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight to significant positive environmental effect in terms of fuel efficiency improvements in the local authority vehicle fleet which will reduce/minimise vehicle fleet related GHG emissions. This has the potential to generate some degree of positive effects on climate and local air quality. This action could lead to the LA transitioning its vehicle fleet to a renewable fuel. The scalable adoption of vehicles based on certain alternative fuels may contribute to the expansion of alternative fuel production sectors. These sectors may indirectly cause environmental effects (including uncertain and potentially negative effects) as a result of fuel sourcing, production and supply processes. Electric vehicles have the potential to generate a variety of uncertain lifecycle impacts, including production related impacts and end-of-life related.	Prepare and implement a pipeline of projects and initiatives for Council Fleet and Transport Management operations to assist in achieving a 51% reduction in non-electrical transport greenhouse gas emissions by 2030 and to adapt to climate change. Programme of measures to include (at the minimum) for the following: • Review of driver behaviour • Education and training programme for Fleet Vehicle Drivers • Review of fuel procurement procedures • Move to alterative vehicles, including EV, and alternative fuel types including HVO. • Optimisation of road works programme • Continue the exploration of acquiring more carbon efficient large vehicles • Consider use of emerging technologies and materials 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.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.3	Prepare and implement a range of measures to achieve **Overall Emissions Reductions** of 51% by 2030 (2016-2018 baseline) and achieve 50% energy efficiency metric (2006-2008 baseline). This will require implementation of the actions outlined in items 3.1 and 3.2, and also a focus on other emissions reductions and adaptation measures, mainly electrical and such as: • Energy Efficient Public Lighting • Energy Efficient Building Lighting Note: Ensure that potential actions maintain/control or reduce existing lumen levels and spectral range to avoid effects on biodiversity.	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 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.	Deliver the Tipperary Public Lighting Energy Efficiency Project while ensuring potential actions maintain/control or reduce existing lumen levels and spectral range to avoid effects on biodiversity.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.4	Participate/lead in national/regional funding programmes for local authorities, for example, the SEAI Energy Retrofit 'Pathfinder' funding programme etc, to support funding for emissions reductions measures.	This action will support the implementation of infrastructures projects such as those defined in the Pathfinder programme for the local authority functional area. 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. This action is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	Participate/lead in national/regional funding programmes for local authorities, for example, the SEAI Energy Retrofit 'Pathfinder' funding programme etc, to support funding for emissions reductions measures; All retrofitting and maintenance works will prioritise energy efficiencies, segregated waste facilities, renewable energy generation (solar PV, geothermal and micro wind generation where feasible), and mobility options (shared bikes, micro mobility and EV charging); having due regard to environmental sensitivities such as European sites and biodiversity etc.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.5	Develop a 'Strategy for Zero Emissions Vehicles' for Tipperary and commence implementation of the actions/ recommendations/targets as identified having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality and cultural heritage.	The development of the Electric Vehicle Strategy may potentially 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. 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. The development of the Electric Vehicle Strategy 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.	Develop an Electric Vehicle Strategy for Tipperary and commence implementation of the actions/recommendations/targets as identified; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality etc.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.6	Roll-out public Electric Vehicle charge points in line with targets set out in Electric Vehicle Strategy (Action 3.5)	The introduction of a public electric vehicle 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. 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. 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.	Roll-out public Electric Vehicle charge points in line with targets set out in Electric Vehicle Strategy (Action 3.5), having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.7	Continue to roll-out the Council's Active Travel Programme maximising available funding from the NTA	In the absence of any mitigation, works involved in constructing park and ride facilities 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. The delivery of expanded sustainable/active travel networks has the potential to promote the use of sustainable and active travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	Continue to roll-out the Council's Active Travel Programme maximising available funding from the NTA, having appropriate regard to environmental sensitivities such as traffic and transport constraints and aspects, European sites and biodiversity.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.8	Carry out an assessment for the delivery of 'car-restricted zones' with reallocation of space, in certain suitable areas i.e. town centres, schools etc where the focus should be on active travel, business and amenity, as appropriate.	The carrying out of an assessment for the delivery of 'car-restricted zones' with reallocation of space will not have any real environmental effect when considered in isolation. 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 realize the potential positive environmental effects associated with sustainable/active travel. In the absence of any mitigation, works involved in the updating of road space have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	Carry out an assessment for the delivery of 'car-restricted zones' with reallocation of space, in certain suitable areas i.e. town centres, schools etc where the focus should be on active travel, business and amenity, as appropriate, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.9	Deliver new Greenway Infrastructure in line with the provisions of the National Cycle Network.	This action supports the development of additional cycling infrastructure. 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. 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.	Deliver new Greenway Infrastructure in line with the provisions of the National Cycle Network, having due regard to environmental sensitivities such as the receiving water environment, local air quality, biodiversity, European sites, cultural heritage etc.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.11	Deliver the Clonmel Pathfinder Programme (1 of 35 exemplar transport projects) by 2025, subject to funding.	This action will support the implementation of infrastructures projects defined in the Pathfinder programme for the local authority functional area. 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. This action is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	Deliver the Clonmel Pathfinder Programme (1 of 35 exemplar transport projects) by 2025, subject to funding; All retrofitting and maintenance works will prioritise energy efficiencies, segregated waste facilities, renewable energy generation (solar PV, geothermal and micro wind generation where feasible), and mobility options (shared bikes, micro mobility and EV charging); having due regard to environmental sensitivities such as European sites and biodiversity etc.
3.13	Implement an annual housing retrofit programme for local authority housing stock in accordance with funding programmes such as the National Retrofit Plan (DECC) and other relevant programmes.	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. There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negative effect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.	Implement an annual housing retrofit programme for local authority housing stock in accordance with funding programmes such as the National Retrofit Plan (DECC) and other relevant programmes, 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.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.16	The Council will seek to show leadership by the design and construction of Net-Zero Homes as part of their building programmes.	This action will support the design and construction of Net-Zero Homes. 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. This action is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	The Council will seek to show leadership by the design and construction of Net-Zero Homes as part of their building programmes, having due regard to environmental sensitivities such as local human receptors, Biodiversity, European sites, water quality and hydrology, and amenity value etc.
3.17	Implement and promote across Council networks, national building refurbishment and vacancy programmes for private sector housing, for example Croí Cónaithe scheme.	This is a promotional related action and will have no real environmental effect when considered in isolation. This action has the potential to have adverse effects on Bats which are Annex IV species, which may roost in vacant buildings	Implement and promote across Council networks, national building refurbishment and vacancy programmes for private sector housing, for example Croí Cónaithe scheme; having due regard to environmental sensitivities such as European sites and biodiversity.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
3.18	Carry out a feasibility study to identify a suitable Local Authority-Led District Heating programme. If feasible, develop a local authority-led District Heating project in a Key Town (Clonmel, Nenagh or Thurles).	This is a study related action and will have no real environmental effect when considered in isolation. Depending on the outcome of this study, it has the potential to support the delivery of Residential sector GHG emission reductions and energy efficiency in a local area. In the absence of any mitigation, such development, 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), and the receiving noise environment (due to the generation of construction phase noise).	Carry out a feasibility study to identify a suitable Local Authority-Led District Heating programme. If feasible, develop a local authority-led District Heating project in a Key Town (Clonmel, Nenagh or Thurles), having due regard to the need to protect sensitive aspects of the receiving environment, such as water bodies, biodiversity, flora and fauna, European sites and local population, from potential negative effects of development, including linear development associated with the project.
4.2	In line with the Town-Centre First programme, reduce vacancy and dereliction in Key Towns, District Towns and Service Centres by collaborating with owners in finding ways that these structures can be brought back to use.	This action has the broad potential to promote good spatial planning and support sustainable land use and sustainable transportation. The action has the potential to support utilizing existing built environment for residential occupancy, which can reduce the requirement for construction of new residential development generally, and the associated embodied GHG emissions associated with such development. Building refurbishment works has the potential to impact protected species that may be present in derelict dwelling, such as protected bat species.	In line with the Town-Centre First programme, reduce vacancy and dereliction in Key Towns, District Towns and Service Centres by collaborating with owners in finding ways that these structures can be brought back to use - 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.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
4.3	In order to underpin the delivery of an active travel programme, support preparation of 'Local Transport Plans' for Key Towns and Sustainable Travel Plans' for 'District Towns'.	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.	In order to underpin the delivery of an active travel programme, support preparation of 'Local Transport Plans' for Key Towns and Sustainable Travel Plans' for 'District Towns,' whist ensuring these plans are: - Designed to mitigate potential environmental impacts associated with supported active travel infrastructure. - Support the carrying out of environmental/biodiversity enhancement during the active travel development process.
4.4	Support the delivery of an 'Integrated Transport Hub' in the Key Towns of Clonmel, Nenagh and Thurles to incorporate and support multi-modal services and active travel linkages with town centre areas/regional services.	This action has the potential to encourage modal shift to active/sustainable travel modes in the community. It will help fully realize the potential positive environmental effects associated with increasing the level of active travel. This action also supports the development of additional transport hubs and ancillary infrastructure and the enhancement/maintenance of existing transport hubs. In the absence of any mitigation, works involved in the construction/enhancement of transport hubs 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.	Support the delivery of an 'Integrated Transport Hub' in the Key Towns of Clonmel, Nenagh and Thurles to incorporate and support multi-modal services and active travel linkages with town centre areas/regional services, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
4.12	Seek to actively support the development of the bioeconomy in Tipperary, including new and emerging technologies, both in the Decarbonising Zone (National Bioeconomy Campus) and elsewhere in the county in line with the National Bioeconomy Action Plan 2023 – 2025, whilst advocating and exerting influence to ensure bioeconomy related development and activities promote climate action co-benefits, and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.	In the absence of any mitigation, the construction of the National Bio-Economy Campus could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, flora and fauna; the receiving air environment (due to the generation of construction dust) and the receiving noise environment (due to the generation of construction phase noise). The consequent development of bio-economy facilities supported by this action, such as anaerobic digestion facilities, for example, could result in a variety of environmental effects, including potential positive climate and material asset related effects, and potential negative construction or operational effects, including effects on biodiversity and noise effects. This delivery of this bioeconomy action generally has the potential to have a moderate to 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.	Seek to actively support the development of the bio-economy in Tipperary, including new and emerging technologies, both in the Decarbonising Zone (National Bio-Economy Campus) and elsewhere in the county in line with the National Bio-Economy Action Plan 2023 – 2025, whilst advocating and exerting influence to ensure Bio-economy related development and activities promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
5.1	The Council will seek to prioritise the delivery of Catchment Flood Risk Assessment and Management (CFRAM) Programme identified flood schemes in Tipperary.	The progression of flood resilience related action has the potential to lead to significant development taking place at and in the vicinity of water bodies. In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust) and the receiving noise environment (due to the generation of construction phase noise). Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SuDS as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. 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 ecological receptors.	The Council will seek to prioritise the delivery of Catchment Flood Risk Assessment and Management (CFRAM) Programme identified flood schemes in Tipperary, 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.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
5.5	Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity levels in keeping with the 'All Ireland Pollinator Plan', and as part of this to develop and implement a pesticide reduction policy for lands and areas managed by the Council.	This action has the potential to have wide ranging slight to significant positive effects on local biodiversity. This action has the potential to have wide ranging slight to moderate effects on local biodiversity, water quality, soil, flora, fauna, etc. Limiting and regulating the use of herbicides and pesticides would prevent to some degree the occurrence of environmental pollution incidents due to the use of these substances. The negative environmental effect of the continued use of such substances is potentially significant, given the hazardous properties of these substances.	Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity levels in keeping with the 'All Ireland Pollinator Plan', and as part of this to develop and implement a pesticide reduction policy for lands and areas managed by the Council - 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.
5.8	Building on work carried out for the 'Tipperary County Wetland Survey', develop a 'Wetland Restoration Plan', this shall identify priority areas for habitat restoration, carbon capture and biodiversity benefits, along with phasing for restoration and having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive.	This action broadly supports the reduction of County GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect in terms of the reduction of GHG emissions and the protection of biodiversity. This action has the potential to generate slight to significant positive effects on biodiversity, flora and fauna, protected species and important wetland habitat. Restoration works, if carried out improperly, could potentially impact or impinge on important habitat or species present at wetlands, resulting in slight to significant environmental impacts. Such works could potentially impact on water quality also.	Building on the 'Tipperary County Wetland Survey', develop a Wetland Restoration Plan, this shall identify priority areas for habitat restoration, carbon capture and biodiversity benefits, along with phasing for restoration, having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
6.11	Support and inform a climate proofing programme for natural water resources, and to better manage flooding at the catchment level, the Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk. A study will be commissioned for this sub-catchment to: i. Identify the reasons why Water Framework Directive water quality objectives are not being met, ii. Set out baseline water quality standards to enable monitoring, iii. Identify solutions (incl. nature based) to reducing flood risk at the catchment level, and, iv. Set out viable, positive and collaborative mechanisms at the community level for how they can be delivered.	This is a study related action and will have no real environmental effect when considered in isolation. Generally, the action will support the delivery of improved flood resilience at the catchment level by identifying opportunities for flood resilience improvements. The possible development of nature based solutions as part of a flood resilience programme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. In the absence of any mitigation, such development could potentially have a variety of negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems.	Support and inform a climate proofing programme for natural water resources, and to better manage flooding at the catchment level, the Council will identify a sub-catchment where water quality objectives are not being met, and where there is an established flood risk. A study will be commissioned for this sub-catchment to: i. Identify the reasons why Water Framework Directive water quality objectives are not being met, ii. Set out baseline water quality standards to enable monitoring, iii. Identify solutions (incl nature based) to reducing flood risk at the catchment level, and, iv. Set out viable, positive and collaborative mechanisms at the community level for how they can be delivered. The programme shall have due regard to the protection of biodiversity and European sites and avoidance of habitat fragmentation.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
6.16	Continue to organise training/seminars to promote adaptive reuse of historic and protected structures.	This is a training/promotional related action and will have no real environmental effect when considered in isolation. This action has the potential to have adverse effects on Bats which are Annex IV species.	Continue to organise training/seminars to promote adaptive reuse of historic and protected structures; having due regard to environmental sensitivities such as European sites and biodiversity.
6.18	Carry out a feasibility assessment of Council owned land assets to determine if it would be possible to identify a site(s) for a 100% owned community-led Renewable Energy development. If considered feasible, progress the project to delivery.	The assessment process associated with this action will not have any real environmental effect when considered in isolation. The action could potentially support the carrying out of renewable energy projects that could generate a range of slight to significant positive environmental effects, including positive effects on climate, water quality, the soils environment and biodiversity. In the absence of mitigation, the action could support the carrying out of potentially significant development which could have negative slight to significant environmental effects, biodiversity impacts, and impacts on the water or soils environment (due to development construction phase run-off of silt or cement based material). Such potential effects can be mitigated by considering planning and environmental related matters and constraints early on during the assessment/design process.	Carry out a feasibility assessment of Council owned land assets to determine if it would be possible to identify a site(s) for a 100% owned community-led Renewable Energy development, ensuring the study has appropriate regard to planning and environmental protected considerations. If considered feasible, progress the project to delivery, having appropriate regard to relevant planning and environmental protection criteria.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
8.6	Participate/lead in strategic projects and collaborations, for example, The Atlantic Green Digital Basin Shannon etc, in order to enhance opportunities for Green/Renewable Energy in Tipperary	This is an administrative action and will have no real environmental effect when considered in isolation (i.e., the meetings held).	Participate/lead in strategic projects and collaborations, for example, The Atlantic Green Digital Basin Shannon etc, in order to enhance opportunities for Green/Renewable Energy in Tipperary, 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.
9.1	Work with and support the National Transport Authority and Tipperary Transport Co-ordination Unit in the delivery and expansion of public transport initiatives in the county.	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. The expansion of the public transport network 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 significant 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.	Work with and support the National Transport Authority and Tipperary Transport Co-ordination Unit in the delivery and expansion of public transport initiatives in the county, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
9.2	Resolve local flooding issues utilising OPW and Department of Transport funding (Drainage programme, Climate Adaptation and Resilience Works, OPW Minor Works Scheme and Nature Based Solutions.	The progression of flood resilience related action has the potential to lead to significant development taking place at and in the vicinity of water bodies. In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), the receiving noise environment (due to the generation of construction phase noise), and the receiving human environment. Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. The delivery of flood resilience action also has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including ecological receptors.	Resolve local flooding issues utilising OPW and Department of Transport funding (Drainage programme, Climate Adaptation and Resilience Works, OPW Minor Works Scheme and Nature Based Solutions, having due regard to the protection of biodiversity and European sites and avoidance of habitat fragmentation.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
9.3	Commence a 'Bridge Structures Inspection Programme' to determine and respond to the effects of climate change and the increased risk of bridge structures being compromised (increased flows, more debris in flood waters, increased flood levels etc.).	This is an inspection related action and will not have a real environmental effect when considered in isolation. This action will however promote the protection of bridge assets from climate change risks - such as a climate change influenced flooding. This activity has the potential to adversely effect Annex II and IV species such as Daubenton's Bat through disturbance and habitat loss or impact protected structures if incorrectly implemented.	Commence a 'Bridge Structures Inspection Programme' to determine and respond to the effects of climate change and the increased risk of bridge structures being compromised (increased flows, more debris in flood waters, increased flood levels etc.), having due regard to the need to appropriately protect and conserve protected structures in accordance with relevant protected structures regulations, and the need to not negatively impinge on any protected species or European sites.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
9.6	Advocate for improved rail transport services on interregional routes, key improvements to include: i. The reopening of the rail route between Rosslare harbour and Waterford Town. ii. Improved rail services/facilities on existing rail routes (Limerick to Waterford and Limerick, Ballybrophy/Dublin lines) that service Tipperary's Towns iii. The development of a rail freight hub at Limerick Junction.	In the absence of any mitigation, such projects, which may involve infrastructure development in the local authority, have the potential to generate a wide variety of negative environmental effects - that range from slight in magnitude to very significant potentially - on, inter alia, population and human health receptors, ecological receptors, the soil and geological environment and the water environment.	Advocate for improved rail transport services on interregional routes, key improvements to include: I. The reopening of the rail route between Rosslare harbour and Waterford Town. II. Improved rail services/facilities on existing rail routes (Limerick to Waterford and Limerick, Ballybrophy/Dublin lines) that service Tipperary's Towns III. The development of a rail freight hub at Limerick Junction. Advocate and exert influence to ensure such improvements promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
9.7	Advocate for improved bus transport in Tipperary and in the region, key improvements to include: • New routes • ·ntegrated ticketing • Increased services	In the absence of any mitigation, such projects, which may involve infrastructure development in the local authority, have the potential to generate a wide variety of negative environmental effects - that range from slight in magnitude to very significant potentially - on, inter alia, ecological receptors, the soil and geological environment, and the water environment.	Advocate for improved bus transport in Tipperary and in the region, key improvements to include: • New routes; • Integrated ticketing; • Increased services. Advocate and exert influence to ensure such improvements promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.

Table 5-2: Environmental Mitigation Measures related Environmental Governance Principles suggested for inclusion in the plan - specifically the plan implementation section

Promote climate action projects that support and maximize environmental co-benefits, such as biodiversity protection and enhancement; improved air, water or soil quality; or enhanced recreation, amenity and cultural heritage value, to ensure win-win benefits are gained.
Support or facilitate climate action related projects and initiatives which seek to make improvements in soil structure, management and health by increasing soil organic carbon - which will create the environmental co-benefits of improving flood resilience by enhancing water holding capacity of soils and increasing the level of GHG sequestration associated with land use functions.
Ensure all development underpinned or supported by climate action is planned and implemented in a manner that appropriately considers the potential for environmental co-benefits, potential environmental impacts and environmental protection requirements. No climate action related development project that is likely to have a significant negative effects on the receiving environment shall be supported.
Flood defence projects, or related maintenance works, shall be carried out in a manner that promotes climate action-biodiversity related co-benefits, and shall have due regard for the protection and enhancement of rare, protected or important habitats and species.
Ensure climate action related projects are carried out in a manner that promotes climate action-cultural heritage co-benefits, and do not result in unauthorized physical damage to cultural, archaeological or architectural features, or unauthorized or inappropriate alteration of the context of sensitive cultural heritage features.
Ensure climate action related projects are carried out in a manner that promotes climate action water quality co-benefits, and align with the provisions of the Water Framework Directive and relevant River Basin Management Plan.
Promote climate action projects that support protected trees, hedgerows and other habitats such as wetlands, floodzones which contribute to green infrastructure.
Support opportunities to improve ecological connectivity of non-designated habitats and sites to improve overall ecosystem resilience and functioning while supporting climate action within the county.
Ensure all projects supported by the council have taken the necessary precautions to identify and manage invasives species, particularly with regard to Schedule III species. No climate action related development project that is likely to cause the spread of invasives species listed in Schedule III shall be supported.
Support opportunities to support peatland restoration, rehabilitation and maintenance while achieving climate targets through the implementation of the climate actions within the plan.

Table 5-3: Mitigation measures within the Local Authority Climate Action Plan which did not require additional text

Mitigation Measure Code	Mitigation Measures Text
2.3	Carry out an Ecological/Habitat audit of local authority owned land, in accordance with an agreed methodology, to identify areas suitable for restoration and enhanced carbon storage though tree-planting and biodiversity measures, having due regard to the need to conserve and enhance protected species, biodiversity and European sites on or connected to local authority lands.
2.4	Carry out a 'Tree Cover Survey and Policy' on lands managed by the local authority, in accordance with an agreed methodology. The study will identify sites for large scale native and mixed woodland planting and set targets for planting and maintaining native trees in urban and rural areas, to enhance carbon storage, biodiversity and landscape, air quality, and urban heat island mitigation.
5.5	Introduce and implement a policy in relation to how Council owned spaces are managed to improve biodiversity levels in keeping with the 'All Ireland Pollinator Plan', and as part of this to develop and implement a pesticide reduction policy for lands and areas managed by the Council - 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.
5.6	Prepare a guidance document and training on the importance of, quality rating and sustainable management of the hedgerows of Tipperary, for Council staff and external stakeholders including farmers/landowners.
5.8	Building on the 'Tipperary County Wetland Survey', develop a Wetland Restoration Plan, this shall identify priority areas for habitat restoration, carbon capture and biodiversity benefits, along with phasing for restoration, having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and support the maintenance and improvement of water quality in line with the aims of the Water Framework Directive.

6. CONCLUSION

Stage 1 AA Screening and Stage 2 AA of the Tipperary Local Authority Climate Action Plan 2024-2029 has been carried out. Implementation of the LACAP has the potential to result in effects to the integrity of any European sites, if unmitigated.

The risks to the safeguarding and integrity of the qualifying interests, special conservation interests and conservation objectives of the European sites have been addressed by the inclusion of mitigation measures that will prioritise the avoidance of effects in the first place and mitigate effects where these cannot be avoided. In addition, all lower-level plans and projects arising through the implementation of the LACAP will themselves be subject to AA when further details of design and location are known.

In-combination effects from interactions with other plans and projects was considered in the assessment and the mitigation measures incorporated into the plan are seen to be robust to ensure there will be no significant adverse effects as a result of the implementation of the LACAP either alone or in-combination with other plans/projects.

Having incorporated mitigation measures, it is concluded that the Tipperary Local Authority Climate Action Plan 2024-2029 is not foreseen to give rise to any significant adverse effects on designated European sites, alone or in combination with other plans or projects[34]. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated.

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

FEHILY TIMONEY

CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 1

Background Information to European Sites

Appendix 1 - Table 1 Quality and site characteristics of European sites considered in the assessment

Site Code	Site Name	Quality of Site	Other Site Characteristics
000030	Danes Hole Poulnalecka SAC	The site contains a small though significant natural limestone cave. As this site contains 250 Lesser Horseshoe Bats (Rhinolophus hipposideros) it is a site of international importance. It is also important as it lies along the eastern limit for the distribution of this species in Ireland. The site also supports a stand of Old Oak woodland.	This site consists of a small fossil limestone cave in the banks of a tributary to the River Ahaclare west of Broadford Co. Clare. The cave is approximately 50 m long and 2-3m wide. The passage is at times quite low. The cave ends in a sump. There is no sign that this water floods other parts of the cave or that the stream outside the entrance floods the cave. The cave is used as a winter hibernation site by Lesser Horseshoe Bats. The area surrounding the cave is mixed woodland which provides ideal foraging habitat and shelter for the bats. A summer roost and important commuting hedgerows down to the Ahaclare are also included in the site.
000668	Nier Valley Woodlands SAC	Woodlands show both primary and secondary successions in development towards an oak-dominated climax. Quality of woods diminished by regular grazing and regeneration is poor.	The site comprises a series of non-contiguous deciduous woodlands along the R. Nier and its tributaries. Betula spp. Corylus avellana and Quercus spp. are the main species with Ilex aquifolium and Sorbus aucuparia. Parts of site are of heath and scrub. Dry grassland and wet grassland also occur. Good representation of Irish mammals and birds. Valley has amenity value and is a popular tourist destination.
000849	Spahill and Clomantagh Hill SAC	The importance of the site lies in the variety of natural and semi-natural grassland communities found; these are generally rare in the south midlands. The site is also important for the small population of the rare and protected species Orchis morio that it supports.	This site comprises three separate areas of which two are dominated by dry grassland, the third by broad-leaved deciduous woodland. The site is underlain by limestone and in places shales and sandstone. The soil on the site is generally quite thin and rock outcrops are scattered throughout. A small limestone cliff is found in one area of the site. Vegetation on the site generally varies with rock type and both calciole and calcifuge species are found.
000939	Silvermine Mountains SAC	Though small the site is important for the presence of the priority habitat Nardus grassland and also for the nationally important population of the Red Data Book species Pseudorchis albida within this habitat. A small but intact example of wet heath is also present. A typical upland fauna occurs with Lagopus lagopus and Lepus timidus hibernicus.	This small site is situated on the northern slopes of the Silvermine Mountains. The site is underlain by sandstone. The dominant habitat is heath which occurs with upland grasslands and scrub. The site is longest on its north/south axis. It rises 150m from north to south and has a maximium altitude of 409m. Grazing is the main landune. A road cuts through the N/S axis of the site.

Site Code	Site Name	Quality of Site	Other Site Characteristics
001197	Keeper Hill SAC	The site supports a significant representation of intact blanket bog which has a varied topography and occurs in association with wet heath. Falco peregrinus and Lagopus lagopus breed within the site. Several rare bryophytes occur within the site.	A small to medium upland site in the midlands underlain by Old Red Sandstone. The dominant habitats are heath blanket bog and upland wet grassland. The site is almost completely surrounded by coniferous woodland. With access easy along forest roads at the trackway to the summit the site is a popular amenity area and vantage point.
001313	Rosturra Wood SAC	The site is important because the Quercus stands are remnants of an ancient woodland which was amongst the largest in Ireland until the 1940s. It also provides a refuge for species of flora and fauna which are otherwise scarce in the locality, most notably the Red Data Book species Cephalanthera longifolia. Unfortunately, only a small portion of the site remains under deciduous woodland.	This site consists of two separate areas in the southern one of which is a nature reserve. The northern area is dominated by conifers while in the southern area the conifers have mostly been clear-felled. Oak woodland occurs mostly as a fringe around both areas. The underlying rock is Old Red Sandstone. The soils vary from thin acid podzols to deeper gleyed brown earths.
001683	Liskeenan Fen SAC	The site supports a good though small example of Cladium mariscus fen. It occurs in association with alkaline fen and Phragmites reed beds. Cutover raised bog scrub and woodland add diversity to the site and the close proximity of the fen and bog habitats is of ecological interest. The site supports a stand of Orchis morio a Red Data Book species. Fen habitats such as at this site are nowadays scarce in Co. Tipperary.	This site is located approximately 7 km north-east of Borrisokane in north Co. Tipperary. It comprises a shallow wet basin dominated by fen vegetation which is adjacent to cutover raised bog. While the fen still floods somewhat in winter it may have been more 'turlough' in character in the past - a former inflow has been diverted to a major drainage channel which drains the western part of the basin. A swallow hole does not appear to be active. The substrate of the wetland area is peat over marl. The cutover bog is quite wet and has a good Sphagnum cover. Scrub occurs over part of the cutover bog while a stand of mixed woodland occurs at the eastern end of the site. Improved grassland occurs around the west and south-west margins of the site along with some wet grassland and unimproved dry grassland.
001952	Comeragh Mountains SAC	This is the most south-easterly upland area in the country and supports a diverse range of upland habitats and species. Habitats of particular note are the oligotrophic lakes dry heaths and alpine heath. Many rare bryophytes are present including Drepanocladus vernicosus.	A medium sized upland site with a diversity of habitats including various heath types of oligotrophic lakes in coums backed by extensive cliff faces upland grassland a variety of rocky habitats and rivers with well developed aquatic flora. The blanket bog at this site is not considered a good example of the habitat. There is a small area of coniferous forestry present within the site. Roads have been developed near Mahon River for tourism purposes.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Three bird species listed on Annex I of the EU Birds Directive breed within the site - Falco peregrinus Circus cyaneus and Pyrrhocorax pyrrhocorax. The Red Data Book fish Salvelinus alpinus occurs in the lakes.	
002124	Bolingbrook Hill SAC	The main importance of this site lies in the presence of good examples of typically upland habitats, namely species rich Nardus grassland wet heath and dry heath. Some blanket bogs also occur but this is small in extent and mostly degraded. A good diversity of native fauna occurs.	This is a small to medium sized upland site on the lower slopes of Mother Mountain. It is in two separate parts. The eastern section is dominated by dry heath on higher ground with upland grassland on mineral soils on the lower slopes. Some of this grassland is improved further areas are maintained by grazing and to the north under-grazing leads to scrub invasion. A small area of bog is present in a depression. The western portion of the site consists mainly of wet heath and acidic grassland.
002165	Lower River Shannon SAC	The site contains many Annexed habitats including the most extensive area of estuarine habitat in Ireland. A good range of Annexed species are also present including the only known resident population of Tursiops truncatus in Ireland all three Irish species of lamprey and a good population of Salmo salar. A number of birds listed on the EU Birds Directive either winter or breed in the site. The site is internationally important for waterfowl with more than 50000 individuals occurring in winter. Several species listed in the Irish Red Data Book are present perhaps most notably the only known Irish populations of Scirpus triqueter.	A very large long site approximately 14 km wide and 120 km long encompassing: the drained river valley which forms the River Shannon estuary; the broader River Fergus estuary plus a number of smaller estuaries e.g. Poulnasherry Bay; the freshwater lower reaches of the Shannon River between Killaloe and Limerick plus the freshwater stretches of much of the Feale and Mulkear catchments; a marine area at the mouth of the Shannon estuary with high rocky cliffs to the north and south; ericaceous heath on Kerry Head and Loop Head; and several lagoons. The underlying geology ranges from Carboniferous limestone (east of Foynes) to Namurian shales and flagstones (west of Foynes) to Old Red Sandstone (at Kerry Head). The salinity of the system varies daily with the ebb and flood of the tide and with annual rainfall fluctuations seasonally.
002312	Slieve Bernagh Bog SAC	This extensive upland site has been selected for the presence of the Annex 1 habitats active blanket bog dry heath and wet heath. The quality of these habitats is generally very good due to low levels of recent disturbance. The occurrence of Vaccinium oxycoccus is of note. The site ranks as one of the most extensive high quality upland areas in the mid-west of Ireland and is of high importance.	This is a large upland site located in the south-east of county Clare. The site comprises three distinct blocks of land separated by extensive conifer plantations which dominate the mountain slopes. The dominant bedrock within the site is base-poor Silurian sedimentary rocks and Old Red Sandstone. These rocks support a rather shallow peat soil which gives rise to the dominant heath habitats.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Areas of conifer plantation have been included within the site. The site is used as foraging habitat by a small population of Circus cyaneus which nests in the Slieve Bernagh mountain range. Lagopus lagopus occurs within the site.	Where peat is deeper, especially on plateau areas, blanket bog has developed. Small areas of conifer plantations have been retained within the site area as well as some areas of cutover blanket bog
002332	Coolrain Bog SAC	This site is one of the most southerly relatively intact raised bogs in the country. Although pool systems are absent the bog surface is relatively wet and flat, and a significant proportion is classified as active bog. There is a high Sphagnum cover which includes the relatively rare species S. imbricatum and S. fuscum. Four small wet flushes dominated by Pinus contorta occur in the active bog area. The area of degraded raised bog is small in extent though shows a typical range of plant communities. Rhychosporian vegetation is represented mainly in the area of active bog. The location of this site close to the southern limits of raised bog distribution in Ireland makes it of high biogeographical interest.	The site is located 9 km south-west of the village of Mountrath Co. Laois. The bog overlies Old Red Sandstone bedrock in contrast to most Irish raised bogs which overlie Carboniferous limestone. An uncut high bog occupies almost half the site area and a high proportion of this is classified as active bog. Substantial areas of the surrounding cutover bog have been afforested with conifers and a portion of this area has been included within the site to preserve the integrity of the high bog. Other areas of cutover have been converted to pasture grassland of varying quality.
002353	Redwood Bog SAC	This extensive site contains good examples of active raised bog degraded raised bog and Rhynchosporion vegetation. The area of active raised bog present is one of the largest in counties Tipperary and Offaly. The location of the bog within the flood-plain of the Shannon and Little Brosna rivers adds to its interest. Redwood Bog is a feeding site for the Little Brosna flock of Anser albifrons flavirostris though its usage nowadays appears to be low. Overall, this site part of which is a state-owned nature reserve is considered as one of the most important relatively intact raised bogs along the banks of the River Shannon.	Redwood Bog is a large, raised bog site located along the eastern banks of the River Shannon in the most northerly corner of Co. Tipperary. The bog is a good example of a flood-plain bog lying at the confluence of the Shannon and Little Brosna rivers. Approximately one-third of the site is uncut high bog though much of this is classified as degraded bog. Cutover bog accounts for approximately 55% of the site area. Commercial peat-cutting still continues within this site dominating the western half. Small parts of the cutover have been invaded by Betula pubescens scrub while other parts have been converted to wet pasture grassland.
004077	River Shannon and River Fergus Estuaries SPA	This is the most important coastal wetland site in the country and regularly supports in excess of 50000 wintering waterfowl. It has internationally important populations of Calidris alpina Limosa limosa and Tringa totanus. A further 16 species have populations of national importance.	The River Shannon and River Fergus Estuaries form the largest estuarine complex in Ireland. The site comprises all of the estuarine habitat west of Limerick City and south from Ennis extending west as far as Killadysert and Foynes on the north and south shores of the Shannon respectively (a distance of some 25 km from east to west).

Site Code	Site Name	Quality of Site	Other Site Characteristics
		The site is particularly significant for Calidris alpina (11% of national total) Pluvialis squatarola (7.5% of total) Vanellus vanellus (6.5% of total) Tringa totanus (6.1% of total) and Tadorna tadorna (6.0% of total). It has Cygnus cygnus Pluvialis apricaria and Limosa lapponica in significant numbers. The site was formerly frequented by a population of Anser albifrons flavirostris, but these have now abandoned the area. The site provides both feeding and roosting areas for the wintering birds and habitat quality for most of the estuarine habitats is good.	Also included are several areas in the outer Shannon estuary, notably Clonderalaw Bay and Poulnasherry Bay. The site has vast expanses of intertidal flats. The main macro-invertebrate community is a Macoma-Scrobicularia-Nereis community which provides a rich food resource for the wintering birds. Eelgrass (Zostera spp.) is present in places. The intertidal flats are often fringed with salt marsh vegetation areas which provide important high tide roost sites for the birds. In the innermost parts of the estuaries the tidal channels or creeks are fringed with species such as Phragmites australis and Scirpus spp. Spartina anglica is frequent in parts.
004137	Dovegrove Callows SPA	Dovegrove Callows is of importance as a high-water feeding site for the internationally important Little Brosna population of Anser albifrons flavirostris. Of particular significance is that it can support the entire flock when most other feeding sites are submerged by floodwater.	The site is situated on the Little Brosna River approximately 2 km downstream of Birr and 11 km from the confluence with the River Shannon. It is typical wet callow grassland that floods regularly. Grazing is the principal landuse.
000261	Derrycrag Wood Nature Reserve SAC	The site is of importance since it contains fragments of an ancient oak woodland which until the 1940s was one of the most extensive in Ireland. The relatively fertile soils support the Coryletosum subassociation of the Blechno-Quercetum a community type which is uncommon in Ireland. The site acts as a refuge for flora and fauna which are otherwise scarce in the locality. The banks of the Woodford River support the Irish Red Data Book species Frangula alnus as well as a number of relatively rare herbs. The site provides an excellent opportunity to re-create an oak woodland.	This site is dominated by a coniferous plantation which contains fragments of old oak woodland. The original ground flora persists beneath the conifers especially where mature Pinus sylvestris occurs. The Woodford River traverses the north-eastern part of the site. The underlying rock is Old Red Sandstone overlain in places by drift. The soils vary from thin acidic podzols to deeper gleyed brown earths.
000585	Sharavogue Bog SAC	Sharavogue Bog SAC is a site of considerable conservation significance comprising two subsites: Sharavogue Bog and Cangort (Kilfrancis) Bog which contain raised bog a rare habitat in the EU and one that is becoming increasingly scarce and under threat in Ireland. It contains good examples of the EU Habitats Directive Annex I habitats Active Raised Bog (7110) Degraded Raised Bog (7120) and Depressions on peat substrates of the Rhynchosporion (7150).	Sharavogue Bog (SAC) (236.55 ha) is located about 8km south of Birr Co. Offaly in the Little Brosna Valley. It consists of 2 raised bog sites. The main area Sharavogue Bog covers 223.43 ha while a smaller outlier Cangort (Kilfrancis) Bog is located 4km further south and comprises 13.12 ha. Sharavogue Bog is situated between the River Little Brosna and an elevated ridge of Carboniferous limestone.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		The site already supports a good diversity of raised bog microhabitats including some hummock/hollow complexes and rewetted cutover bog. Ireland has a high proportion of the total EU resource of Atlantic raised bog (over 50%) and so has a special responsibility for its conservation at an international level. Along the eastern margins of Sharavogue there is upwelling of base-rich water into the lagg zone, and these areas now support carr woodland and calcareous fen vegetation. Areas of wet lagg vegetation such as this are very rare in Western Europe and the lagg system at Sharavogue is one of the best developed in the country. The protected semi-aquatic plant species Slender Cottongrass (Eriophorum gracile) grows in fen vegetation in the lagg zone while the nationally rare shrub Alder Buckthorn (Frangula alnus) occurs in dry bog woodland on cutaway. Although the Cangort (Kilfrancis) Bog subsite of the SAC is small (13.12 ha) and currently lacks annex habitats full restoration measures have been implemented and it has the potential to support the retention of Degraded Raised Bog in Cangort Bog NHA (000890).	Sharavogue includes 137 ha of uncut raised bog and 86.43 ha of surrounding areas which include cutover bog wet grassland semi-natural woodland and an area of wet lagg vegetation in the cutover along the eastern margin of the bog. The bog is underlain by low permeability limestone and limestone till. Groundwater upwells at the base of the ridge that occurs to the east of the bog. Cangort (Kilfrancis) Bog is part of Cangort Bog NHA (000890), and it has been restored as part of an EU LIFE project. The site consists of 2.53 ha of high bog and 10.59 ha of cutover, most of which was afforested in the 1970s. The underlying geology is carboniferous limestone. Sharavogue Bog is one of the few remaining raised bogs in Ireland situated on a floodplain. It has a well-developed dome of uncut peat which is long and relatively narrow. Active Raised Bog (ARB) is confined to the more southern central part of the dome covers 25.8 ha but lacks any areas of central ecotope as a result of long-term drying out caused by peat cutting and marginal and river drainage. In addition, drains were inserted across about 60% of the high bog dome in the early 1990s. All the drains on the high bog and many of the drains on the south eastern area of the cutover was dammed in the late 1990s as part of an EU Cohesion project to restore peat forming conditions on the high bog and cutover. The bog surface has also been damaged by burning in the past and there are invasive native and non-native species are present on the bog dome. The dominant micro-topography consists of Sphagnum hummocks and hollows. Pools are scarce and Sphagnum cuspidatum filled lawn-like depressions are very occasional. Rhynchosporion depressions (7150) are open pioneer type vegetation communities of wet depressions on acid peat in both natural and man modified situations. Rhynchosporion vegetation occurs along pool edges (very scarce in Sharavogue Bog) on lawns and hollows underlain by deep wet and quaking peat. Cangort Bog NHA is a remnant of a larger area of bog, much of which has now been cutover and reclaimed for forestry and agriculture.

Site Code	Site Name	Quality of Site	Other Site Characteristics
			In the SAC section of the NHA all the afforested areas on the high bog and cutover were clear-felled and the associated drains blocked in 2014. Site specific conservation objectives have been set for Sharavogue Bog SAC for Active Raised Bog. One of the key targets is to restore the area of Active Raised Bog to 40.9 ha and it has been determined using modelling techniques that there is potential for 14.7 ha of Degraded Raised Bog to be restored to Active Raised Bog on the high bog following restoration measures. There is also long-term potential for 0.4 ha of Bog peat-forming habitats (BPFH) to develop if restoration measures are undertaken on cutover areas. A restoration plan has been developed to achieve these targets. Detailed objectives have yet to be developed for the Cangort (Kilfrancis) subsite of the SAC but will be produced as part of the restoration plan for the Cangort Bog NHA site. Cangort (Kilfrancis) Bog is being actively managed for conservation by the landowner Coillte as part of an EU LIFE Project and most of the required restoration measures have already been carried out. Sharavogue Bog is part of the current NPWS Restoring Active Raised Bog in Irelands SAC Network 2016-2020 (LIFE NAT/IE/000032).
000641	Ballyduff/Clonfinane Bog SAC	Ballyduff/Clonfinane Bog is a medium sized raised bog which contains good examples of the Annex I habitats active raised bog degraded raised bog depressions on peat substrates (Rhynchosporion) and bog woodland. The central parts of both sub-sites are very wet and there are very good pool complexes, especially at Clonfinane. At Clonfinane there is some potential for the development of lagg vegetation along the northern margins of the site where the peat depth appears to be naturally shallow. Although parts of the site have been drained in the past there has been significant restoration of the high bog areas in the Clonfinane portion of the site. The nationally rare shrub Frangula alnus grows in tall Betula pubescens woodland along the northern margins of Clonfinane.	This site is underlain by low permeability Waulsortian limestones. Clayey tills black lake clays and laminated lake clays dominate the subsoils. The bog has developed in a number of former shallow laustrine basins which coalesced over low ridges.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000647	Kilcarren-Firville Bog SAC	Kilcarren-Firville Bog is a relatively large, raised bog site which contains good examples of the priority Annex I habitat active raised bog and the non-priority habitats degraded raised bog and depressions on peat substrates (Rhynchosporion). The quality of these habitats is good and in addition there is a large area of surrounding cutover which contains a number of regenerating areas and some areas of well-developed scrub. These scrub areas provide habitat for a population of the nationally rare shrub Frangula alnus. Of particular hydrological note is the presence of infiltration zones along the margins of the site. These could potentially be developed into lagg areas in the future.	This site is underlain by low permeability Waulsortian limestone bedrock with low permeability clayey limestone tills dominating the subsoil. Peat developed in a number of basins which coalesced over low ridges. This has led to the development of infiltration areas along the northern edges.
002126	Pollagoona Bog SAC	This site is important as it represents a good example of a relatively intact saddle blanket bog. Variation is displayed in micro-topography structure and in species composition.	This is a small intact saddle blanket bog. Adjacent areas of formerly afforested peatland are included in the site as part of an EU LIFE funded restoration project.
002206	Scohaboy (Sopwell) Bog SAC	Scohaboy (Sopwell) Bog SAC is a site of considerable conservation significance comprising raised bog a rare habitat in the EU and one that is becoming increasingly scarce and under threat in Ireland. It contains good examples of the EU Habitats Directive Annex I habitat Degraded raised bog (capable of regeneration) which is being restored to the priority Annex 1 habitat Active raised bog. The site already supports a good diversity of raised bog microhabitats including some hummock/hollow complexes tear pools and rewetted cutover bog and is one of the more southerly raised bogs in the south Midlands which adds significantly to its ecological importance. Ireland has a high proportion of the total EU resource of raised bog (over 50%) and so has a special responsibility for its conservation at an international level. The site is being actively managed for conservation as part of the Coillte EU LIFE Project and most of the required restoration measures have already been carried out. Those measures that remain or are ongoing should be achievable with average effort.	Scohaboy (Sopwell) Bog SAC (002206) comprises 71.91 ha of raised bog (62.36 ha of high bog and over 9.55 ha cutover) which occupies the central section of the northern end of Scohaboy Bog NHA (000937). Scohaboy Bog is a Midland type raised bog developed in a basin. The site is bounded by peatland on all margins apart from the north where a stream flows along the northern margin. Cutover bog occurs in the south-east of the site and an area of approximately 19 ha of clear-felled coniferous plantation is present on the high bog to the north of the site. Over 43 ha of the high bog was never afforested but a considerable proportion of that area was subjected to intensive but shallow drainage. That drainage was not maintained and, in some areas, has naturally partly infilled by bog moss Sphagnum species regrowth over the years. The afforested area was planted in the 1980s and was all clearfelled by 2013. Much of the unafforested high bog has vegetation typical of Midland Raised Bog type. The two scarce hummock forming bog mosses Sphagnum fuscum(sensu lato) and S. austinii occur with the latter being locally

Site Code	Site Name	Quality of Site	Other Site Characteristics
		An After-LIFE management plan is being developed by Coillte for the future conservation management of the SAC. The SAC is located within the raised bog Scohaboy Bog NHA (000937) the conservation management of which should support the redevelopment of Active Raised Bog in the SAC. The presence of White-clawed Crayfish (Austropotamobius pallipes) a species listed in Annex II of the EU Habitats Directive adds to the diversity and scientific value of the site. The population at this site is considered to have a favourable conservation status with the presence of adults and juveniles. The presence of this species increases the overall scientific interest of the site.	frequent in places. Some of the recovering pool systems are quite large with Bog Bean (Menyanthes trifoliata) and Great Sundew (Drosera anglica) present. When the conifer plantation in the SAC were removed the intensive drainage system associated with it was blocked by 2014 as part of an EU funded LIFE project so as to raise the water table and restore Active raised bog (ARB) on the site. Prior to the felling there were relatively few bog species present. With the clear-felling of conifers and blocking of drains the high bog appears to be re-wetting with some areas of wet flats and hollows already developing and water levels now much higher throughout the year. However, the majority of the former plantation will not develop vegetation characteristic of the wettest conditions as the surface slopes in this area are too steep and there is a considerable amount of conifer and birch regeneration occurring in these areas. The main benefit of the tree removal and the drain blocking will be to improve the hydrology of the adjacent areas of unafforested high bog to the south of the plantation. Three areas covering over 11.6 ha have been identified by hydrological modelling as Degraded Raised Bog (7120) habitat (DRB). These now have standing surface water in the drains hollows and pools for most of the year and considerable areas of regenerating Sphagnum species. It is considered that this area will rapidly develop into Active Raised Bog within 10 years. Much of the cutover to the south-east of the site is dominated by Purple Moor-grass (Molinia caerulea) with scattered scrub of Gorse (Ulex europaeus) and Downy Birch (Betula pubescens) in places. Peat cutting ceased in the area in 2015 and the cutover drains were all blocked in late 2015. The area has now rewetted and should eventually support raised bog communities and species. It is estimated that approximately 1.6 ha of this cutover has the potential to support Active Raised Bog in the medium to long term (i.e., over 30 years period).

Site Code	Site Name	Quality of Site	Other Site Characteristics
002207	Arragh More (Derrybreen) Bog SAC	The large area of Degraded Raised Bog habitat in Arragh More Bog SAC is of significant conservation value as it has the potential for restoration to over 10 ha of Active Raised Bog which is a priority habitat in the E.U. and one that is scarce and under threat in Ireland. The restoration actions undertaken to date are resulting in active redevelopment of the habitat towards Active Raised Bog which adds to the diversity and scientific value of the site. Large sections of the Degraded Raised Bog in the more flushed parts of the bog may also develop directly or via Active Raised Bog into the very rare priority habitat Bog Woodland (91D0) which would add further to the scientific interest of the site. The site is being actively managed for conservation as part of the Coillte E.U. LIFE Project. The SAC is located within the raised bog Arragh More Bog NHA (000640) the conservation management of which should support the redevelopment of Active Raised Bog in the SAC while the management of the SAC will support the retention of 3 ha of Active Raised Bog in the NHA. Overall, there is a large area of bog with good restoration potential for two priority habitats and most of the required restoration measures have already been carried out. While some significant threats remain the size and potential of the site makes it of international importance.	Arragh More (Derrybreen) Bog SAC (002207) comprises 90.58 ha of raised bog (57.9 ha of high bog and 32.68 ha cutover) which occupies the north-western section of Arragh More Bog NHA (000640). Arragh More Bog NHA developed originally in at least 3 basins aligned in a north south direction which were initially separated by low ridges of relatively impermeable glacial till overlying limestone bedrock. As these bogs grew, they eventually coalesced over these low ridges to form one bog with a very complex shape. Arragh More Bog NHA is therefore the remnant of a large bog that was originally part of a system of interconnecting bogs which are now separated by roads and cutover that has been reclaimed for agriculture. The SAC occupies the western parts of the two most northerly basins. The surface of the high bog in the central basin is lower than that to the east and south and receives significant amounts of runoff from them resulting in the development of an internal flush system. The SAC is bordered by forest plantations on cutover to the north raised bog and cutover to the east and south and agricultural grassland to the east. The SAC was mostly afforested in in the 1970s with just over 12 ha (13%) of high bog in the north-east and south of the site being left unplanted. The remaining areas of intact high bog have vegetation typical of a Midland Raised Bog. Some hummocks of the relatively scarce S. austinii and S. fuscum (sensu lato) have been recorded. Two main areas of high bog covering 11.4 ha have been identified as Degraded Raised Bog (DRB) and thus with potential to develop peat forming habitats (Active Raised Bog and Bog Woodland). These consist of a large area (9.9 ha) to the east with two large lobes and a much smaller one (1.5 ha) to the south-east section of the SAC. There is a small area of Bog Woodland to the east just outside the site to provide the characteristic species for that habitat.

Site Code	Site Name	Quality of Site	Other Site Characteristics
002236	Island Fen SAC	This site is important as it supports fine examples of the Annex 1 habitat Juniper scrub formations over calcareous graslands/heath along with some small though species rich areas of alkaline fen - also an Annex 1 habitat. This Juniperus communis site is the only site proposed for this habitat type east of Lough Derg.	The geology of the site is of Lower Carboniferous Limestone and the principle soil is grey brown podzolic. The site overlies an old lake bed lined with shelly marl. The soil cover is generally thin with some rocks protruding locally. Much of the site is dominated by Phragmites australis reedbeds which merge northwards into calcareous grasslands/heath with upright Juniper scrub formations. To the west and south small zones of alkaline fen occur along with a small hazel and ash woodland.
002258	Silvermines Mountains West SAC	Silvermines West is a substantial upland area dominated by wet heath with smaller areas of dry heath blanket bog (incl. degraded bog) acid grassland scrub and outcropping rock. The site has been selected for the presence of the Annex 1 habitat wet heath. The site is one of the largest remaining unafforested upland areas in the north Tipperary area a large proportion of the adjoining uplands having been afforested in recent decades. The quality of the site is high due to the relatively low levels of burning and grazing in the recent past. Site is used as foraging habitat by part of the important Circus cyaneus population that nests in the Silvermine-Slievefeelim uplands.	This is an upland site dominated by heath grassland and blanket bog habitats. The dominant bedrocks within the site are Silurian sandstones and shales which outcrop frequently especially at higher elevations with old red sandstone at lower elevations. Deposits of minerals such as zinc lead and copper - now largely exhausted - occur along the northern boundary of the site where the older rocks meet limestone. Extensive disused mine workings - dominated by a large tailings pond - lie along the north-eastern boundary and some areas within the site show indications of disturbance from these past mining works. Most of the adjoining mountain ridge to the east has been afforested with conifers.
004032	Dungarvan Harbour SPA	This site qualifies for international importance as waterfowl numbers regularly exceed 20000. It also qualifies as it supports internationally important populations of Branta bernicla hrota Limosa limosa and Limosa lapponica. The Limosa lapponica population is one of the largest in the country, comprising 6.0% of the national total. A further eleven species have populations of national importance, notably Pluvialis squatarola (5.9% of total) Pluvialis apricaria (3.3% of total) Calidris alpina (3.6% of total) Calidris canutus (2.8% of total) and Tadorna tadorna (3.6% of total). The site provides high quality feeding areas and good roost sites. At high tides, however roosts outside of the site area are also used.	The site is a large east-facing bay sheltered on the south by Helvick Head and Ballynacourty Point to the north. A narrow north-south shingle spit which almost divides the bay in two provides very sheltered conditions for the inner part of the site. The bay is essentially the estuaries of three main rivers, the Brickey the Colligan and the Glendine. At low tide very extensive intertidal sand and mud flats are exposed. These have a diverse macro-invertebrate fauna and Zostera is present. Salt marshes often fringe the intertidal flats especially in the more sheltered areas. The site includes a substantial area of shallow marine water in outer Dungarvan Harbour.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Overall, this is the most important site for waterfowl in County Waterford and is one of the most important in the region.	
004058	Lough Derg (Shannon) SPA	Lough Derg is of importance for both breeding and wintering birds. The islands support nationally important breeding colonies of Sterna hirundo Phalacrocorax carbo Podiceps cristatus and probably Aythya fuligula. It is a traditional site for nesting Larus ridibundus but there is no recent survey information. In winter the lake is particularly important for diving ducks with nationally important populations of Aythya fuligula and Bucephala clangula occurring. Cygnus olor also has a population of national importance whilst a range of other species occur in lesser numbers including Cygnus cygnus Anas crecca Fulica atra and Vanellus vanellus. A flock of Anser albifrons flavirostris has traditionally used the site where they feed on grassy islands, but birds have seldom been recorded in recent years.	Lough Derg is the largest of the Shannon Lakes, being some 40 km long. Its maximum breadth across the Scarriff Bay-Youghal Bay transect is 13 km but for most of its length it is less than 5 km wide. The lake is relatively shallow at the northern end, being mostly 6 m in depth but in the middle region it has an axial trench and descends to over 25 m in places. The narrow southern end of the lake has the greatest average depth with a maximum of 34 m. The greater part of the lake lies on Carboniferous limestone, but the narrow southern section is underlain by Silurian strata. Most of the lower part of the lake is enclosed by hills on both sides, the Slieve Aughty Mountains to the west and the Arra Mountains to the east. The northern end is bordered by relatively flat agricultural country. The lake shows the high hardness levels and alkaline pH to be expected from its mainly limestone catchment basin and it has most recently been classified as a mesotrophic system. The lake has many small islands, especially on its western and northern sides. The shoreline is often fringed with swamp vegetation. Aquatic vegetation includes a range of charophyte species.
004086	River Little Brosna Callows SPA	This site is of international importance because it regularly supports in excess of 30000 waterfowl and is rated among the top five sites in the country for numbers of wintering birds. At a species level it supports internationally important populations of Anser albifrons flavirostris and Limosa limosa. The Anser albifrons flavirostris flock is the largest outside of the Wexford Slobs whilst the Limosa limosa population accounts for over 15% of the national total and is the largest in the country. It has nationally important populations of a further seven species: Cygnus cygnus Anas penelope Anas crecca Anas acuta Anas clypeata Pluvialis apricaria and Vanellus vanellus.	The site follows the River Brosna from its confluence with the River Shannon for approximately 9 km south-eastwards to just beyond New Bridge. The main habitat present is grassland that is improved to varying extents and which is seasonally flooded. The less improved areas are species-rich. The grassland is used mainly for pasture, but some is used for hay-making. The river channel is fringed by swamp and marsh vegetation. The site adjoins several raised bogs and cutover bogs.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		The Anas penelope population is over 10% of the national total whilst the Anas acuta Anas clypeata and Pluvialis apricaria populations are over 5% of the respective totals. The Calidris alpina population is notable as inland populations of this species are rare. It has substantial nesting populations of Gallinago gallinago and Tringa totanus though the numbers of nesting waders has decreased since the 1980s. Crex crex formerly bred but not since the early 1990s. This site provides one of the few remaining examples in the country of a large river system which still floods in a fairly natural way.	
004096	Middle Shannon Callows SPA	This site is the largest area of semi-natural floodplain grassland in Ireland and has very many features of a natural ecosystem. Along with its main tributaries the River Suck and River Brosna it represents one of the most important wetland systems in the country. It is of International Importance for wintering waterfowl as numbers regularly exceed the 20000 threshold (mean of 34985 for the 5 winters 1994/94-1998/99). Of particular note is the presence of an Internationally Important population of Cygnus cygnus. A further five species have populations of national importance: Cygnus olor Anas penelope Pluvialis apricaria Vanellus vanellus and Limosa limosa. There is a well documented spring passage of Limosa limosa along the river valley. The Shannon callows are also of high importance for breeding birds. In particular it has the largest concentration of Crex crex in Ireland. Since 1991 a conservation programme involving annual monitoring of population size, practical habitat management and publicity has been in operation. Coturnix coturnix a very rare species in Ireland also breeds in the grasslands. Several wader species, notably Vanellus vanellus Gallinago gallinago and Tringa totanus have important breeding populations though these have declined substantially since the 1980s. The scarce breeding species Anas clypeata nests in small numbers each year. The callows are one of the very few sites in Ireland where Limosa limosa has bred. The habitats also support a range of ground nesting passerine species notably	The site follows the River Shannon from Athlone just below Lough Ree to Portumna just above Lough Derg, a distance of over 50 km. It includes much of the flood plain of the river varying in width from approximately 0.5 km to up to 1.5 km in places. A weir at Meelick divides the flooding regime. The main habitat present is humid grassland improved to varying extents that is seasonally flooded. The less improved areas are species-rich. The grassland is used mainly for pasture, but some is used for hay-making. The river channel is fringed by swamp and marsh vegetation. There is an extensive system of drainage channels many of which support a diverse flora. The callows often border raised bogs some of which are still intact.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Locustella naevia and Alauda arvensis. In autumn and winter Circus cyaneus is a regular visitor.	
000216	River Shannon Callows SAC	This site is the largest area of semi-natural floodplain grassland in Ireland and Britain and has very many features of a natural ecosystem. It has been placed among the most 'natural' floodplains in western Europe. It is subject to regular and prolonged annual winter flooding. Wooded alluvial islands which flood regularly occur at one location. A number of Red Data Book and scarce plant species occur on the site the scarce species including Leucojum aestivum Sium latifolium Botrychium lunaria and Lemna gibba. In addition, the site contains a very wide variety of native plant species. A small area of limestone pavement at Clorhane is of particular importance as it is the only example of this habitat in the region. Along with its tributary the Little Brosna (designated separately) this is one of the great waterfowl sites in Ireland with huge numbers of a wide range of species occurring in winter with a mean peak of 34985 waterbirds recorded from 1995/96 to 1999/00. This is the third highest for an inland site in Ireland. The highest is the Little Brosna which is an extension to the Middle Shannon Callows. Only three estuarine sites are higher. In 1996/97 one species was of International Importance (Whooper Swan) and six species were of National Importance. A small flock of Anser albifrons flavirostris regularly use a few locations on the site and these are part of the Internationally Important flocks of both the Little Brosna and the River Suck. It is one of very few significant inland sites in Britain or Ireland for Calidris alpina. It is the top site in the country for Cygnus olor and close to that for Cygnus cygnus Vanellus vanellus and Pluvialis apricaria. The E.U. Birds Directive Annex I species Circus cyaneus regularly uses the site for hunting in autumn and winter. Perhaps even more important are its nesting Crex crex Coturnix coturnix and breeding waders. In 1987 1204 pairs of breeding waders were recorded (including adjacent parts of the Shannon) mainly Vanellus vanellus Gallinago gallinago Numenius	The River Shannon is the largest river in Ireland and its central route drains a large percentage of the whole country. It has proved too powerful to be tamed by drainage schemes in the past and this central section is still free to flood the surrounding lowlands in winter. It is a well-used agricultural resource of low intensity during the summer. This floodplain functions as a semi-natural meadow/marsh habitat (used for grazing or hay-making). There is an extensive system of surface drains. The site is linear running for about 50 km at an average width of about 0.75 km (but reaching 1.5 km in several places). For about half its length it borders raised bogs most of which are in the process of large-scale peat harvesting. Esker ridges lie adjacent to the callows in some places. There are areas of both relict and active levees. A weir at Meelick divides the flooding regime. Ecological diversity is caused and maintained by multiple ownership variation in the flooding regime due to the topography of the callows hundreds of kilometres of drainage ditches differences in the amount of peat and alluvium in the soils and by the extensive nature of the site. The main habitat on the site is humid grassland managed for hay and pasture and these areas have the same management regime as the lowland hay meadows and Molinia meadows.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		arquata and Tringa totanus. Crex crex has one of its last strongholds here with 70 and 66 calling birds present in 1998 and 1999 respectively. The Shannon Callows is one of the few areas in Ireland where Coturnix coturnix breeds. Numbers vary between years but up to 14 males have been heard. There are high populations of ground-nesting passerines such as Alauda arvensis Anthus pratensis Locustella naevia and Emberiza schoeniclus on the site. The River Shannon Callows is a breeding site for two Red Data Book waterbird species: Limosa limosa islandica and Anas clypeata. The Red Data Book species Anas acuta has also bred on the site though its current status is unknown. The E.U. Birds Directive Annex I species Falco columbarius bred on the site in 1996. Large rivers flowing unfettered through lowland floodplains are now rare anywhere in Europe. This river and its associated habitats are of the highest conservation importance.	
000308	Loughatorick South Bog SAC	The largest of three highland blanket bogs in the Slieve Aughty mountains with vegetation intermediate between lowland and mountain blanket bog a relatively rare habitat type in Ireland. Remarkably intact blanket bog with a range of altitudinal topographic and vegetation variation and including the most western station for Andromeda polifolia on an upland blanket bog. Site used by Lagopus lagopus and Gallinago gallinago.	A highland blanket bog encompassing the summits of Scalp (317m) and Bohatch Mountain (379m) at the southern end of the Old Red Sandstone Slieve Aughty mountain range. The site incorporates the headstreams of the Coos Conra and Bow River catchments and includes a range of upland habitats i.e., blanket bog heath rock outcrop fens flushes and Molinia grassland.
000412	Slieve Bloom Mountains SAC	One of the best and least disturbed mountain blanket bogs in Ireland representing an important biogeographical link in the east/west gradient of bog variation. Contains transitional elements between raised and blanket bogs notably Andromeda polifolia and Vaccinium oxycoccus and includes extensive heaths and headwater streams. Wet heath is well represented within the site. Alluvial woodland occurs within the Camcor River valley - this is of variable quality due to afforestation, but quality will be improved with sensitive management by the forestry agency. The Slieve Blooms is a stronghold for breeding Circus cyaneus.	An isolated inland mountain range composed of Old Red Sandstone forming an elongated ridge extending for 25km in a North-east/South-west direction supporting extensive mountain blanket bog development. The site includes the headwaters of several river systems including the river Barrow. Surrounding lands are extensively afforested with conifer monocultures.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000831	Cullahill Mountain SAC	The importance of this site lies in the presence of an unusually large area (for south-east Ireland) of unimproved herb-rich calcareous grassland. On a national scale the extent of this habitat is, however, relatively small. The site boasts a large population of the scarce Green-winged Orchid Orchis morio.	This site is situated on a small limestone plateau on the western side of which is a steep escarpment. Soils are relatively shallow and exposed limestone outcrops are common in several areas of the site. The dominant vegetation comprises herb-rich dry calcareous grassland (Eu-Mesobromenion) in which the occurrence of five orchid species and in particular the abundance of Orchis morio is notable. The western side of the site has Ash/Hazel woodland. The site appears to contain a rich invertebrate fauna.
000919	Ridge Road SW of Rapemills SAC	The importance of this site lies in the unimproved herb-rich esker grassland. As well as supporting vegetation communities in which several notable herb species are found the site also supports a large population of Orchis morio, a Red Data Book species. Sites such as this are becoming increasingly rare in Ireland through grassland improvement or removal of the sites for gravel.	A relatively extensive unimproved grassland site situated on steep-sided twin esker ridge formed from glacial gravels. The main vegetation type on the site is unimproved dry grassland in which several notable herb species are found. Open scrub and hazel scrub woodland is found in many parts of the site. The western end of the site has some improved grassland.
000934	Kilduff Devilsbit Mountain SAC	The main importance of the site lies in the fairly extensive area of good quality species-rich Nardus grassland that occurs and in the large population of the nationally rare and protected orchid Pseudorchis albida that it supports. The site is relatively diverse and includes a small area of good quality dry heath. Undamaged unimproved upland grassland sites such as this are becoming increasingly rare in Ireland.	The site is situated on the north-eastern slopes of Devilsbit Mountain, a flat-topped ridge composed of silurian grits. The main vegetation type found on the site is species-rich heathy grassland. Degraded Molinia-dominated wet heath dry heath and stands of Quercus sp./Fagus sylvatica woodland occur in the upper sections of the site. Light scrub is scattered throughout the lower sections of the site and here several streams and flushes are found. A wet broad-leaved Alder woodland in the wet area at the eastern side of the site.
001013	Glenomra Wood SAC	This is an old oak woodland which was clear-felled and left to regenerate naturally resulting in a rather dense and even-aged stand. The understorey is also dense which along with recent grazing has resulted in an impoverished ground flora. The wood is unmanaged and provides a haven for species such as Martes martes while ditches within the site support an abundant population of Rana temporaria.	This site is dominated by deciduous woodland on a west facing slope. Although probably of ancient origin it was clear-felled around 50 years ago and left to regenerate naturally. The diversity of the site is enhanced by an area of species-rich grassland a small stream and a small area of raised bog.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		The association with other semi-natural habitats notably wet grassland and bog is of value.	
001847	Philipston Marsh SAC	The site supports an important though small example of transition mire vegetation in a region where such habitat is rare. It has many of the expected flora species for the habitat. A range of scarce plant species are found at the site, notably Epipactis palustris Galium uliginosum and Eriophorum latifolium. The site appears to be in a fairly natural state.	The site is within the upper reaches of the Mulkear catchment. The southern part is flushed with calcareous groundwater issuing from the base of a gentle slope. A small stream or drainage channel flows along part of northern boundary. The site comprises a mosaic of wetland habitat types of mainly reed swamp alkaline fen and transition mire. A small area of open water occurs. Willow (Salix spp.) scrub is present in places and some wet grassland is included. Some of the areas immediately adjacent to site are planted with conifers.
002125	Anglesey Road SAC	The primary scientific interest of this site is the presence of a fairly good example of Nardus grassland. Species rich Nardus grassland is a rare habitat in Ireland.	A small site on the lower slopes of Mother Mountain. It consists mainly of grassland on mineral soil. Some of the grassland has been improved. The other main component of the site is scrub along the river and lateral gullies. On steeper slopes a form of dry heath with Pteridium aquilinum invasion is found. A road runs through the site.
002137	Lower River Suir SAC	This site contains a range of Annex I habitats including floating river vegetation, eutrophic tall herbs alluvial forest old oak woods yew woods and salt meadows. The site is very important for the presence of a number of scarce and specialised Annex II animal species with particularly important populations of the fish species Salmo salar and Alosa fallax fallax. Lutra lutra is widespread on the system as is Austropotamobius pallipes. The site supports two Annex I priority and five non-priority Annex I habitats. There are four Annex I species of birds present within the site. The rare lichen Lobaria pulmonaria an ancient woodland indicator occurs at Portlaw Oak Woods within the site.	The Suir River system flows through the counties of Tipperary Kilkenny and Waterford. The site consists of all of the freshwater stretches of the Suir immediately south of Thurles the tidal stretches as far as the confluence with the Barrow/Nore immediately east of Cheekpoint in Co. Waterford and many of the tributaries including the Clodiagh the Lingaun Anner Nier Tar Aherlow and Multeen. Much of the system flows through Carboniferous limestone though towards Waterford the geology changes to Old Red Sandstone and Ordovician bedrocks. The site supports a diverse range of habitats including marsh reedbeds wet and dry grasslands broad-leaved semi-natural woodlands salt marshes tidal rivers and estuarine channels. Substantial areas of improved grassland and arable lands are included for water quality reasons.
002324	Glendine Wood SAC	This is an extremely important site for Trichomanes speciosum with 22 sporophyte gametophyte and mixed generation colonies currently	The site lies 3-4 km north-east of Dungarvan in Co. Waterford. It consists of a steep-sided narrow ravine cut through a low ridge of Old

Site Code	Site Name	Quality of Site	Other Site Characteristics
		known. The colony size is on average greater than is found elsewhere with the result that in comparison to other sites a very large area is occupied by the species. A very large number of sporophyte fronds of all types (sterile fertile juvenile young unfurling) have been recorded. Habitat is a classic deep ravine which is well-wooded. Site also has Meles meles a Red Data Book species and the river supports Cinclus cinclus.	Red Sandstone by the Glendine River. Woodland covers the valley sides and the land to the east and west of the mouth of the ravine. The woodland within the ravine is mostly mixed deciduous dominated by Fraxinus excelsior and Corylus avellana. The field layer is rich and varied with ferns forming a distinctive feature. Above the ravine the woodland is dominated by dense stands of the introduced Prunus laurocerasus. Small cliffs are exposed in part of the ravine.
002356	Ardgraigue Bog SAC	This relatively small site contains good examples of active raised bog degraded raised bog and Rhynchosporion vegetation. The site is important because of its high watertable and the relatively undisturbed conditions which prevail on the high bog in spite of some intensive peat-cutting along the high bog margins. Sphagnum cover is unusually high and the presence of large amounts of the nationally rare moss Sphagnum pulchrum demonstrates that very wet conditions prevail. A small flush on the high bog supports some unusual plant species such as Melampyrum pratense and Empetrum nigrum. A number of associated raised bog sites occur in close proximity to this site.	Ardgraigue Bog is a relatively small midland/western raised bog site located north-east of Killimor village in the east of Co. Galway. The bog overlies Carboniferous limestone bedrock and has developed in a small topographical basin. Most of the surrounding land is dominated by fields of agricultural grassland. A small core of uncut high bog is surrounded by cutover which has been reclaimed in places to produce agricultural grassland. Scrub has colonised some parts of the cutover.
004094	Blackwater Callows SPA	The site is of high importance for wintering waterfowl. It supports an internationally important population of Cygnus cygnus and nationally important populations of Anas penelope Anas crecca and Limosa limosa. The population of Limosa limosa has exceeded the threshold for international importance at times. Formerly it had a regular population of Cygnus columbarius bewickii, but this no longer occurs reflecting a contraction of range at a national level. Egretta garzetta breeds locally and this species is now a regular visitor to the site. The Blackwater system is an important salmonid fishery and is of high conservation value for Salmo salar. It also supports important populations of Lampetra planeri L. fluviatilis Petromyzon marinus and Alosa fallax fallax. Lutra lutra is widespread throughout the site.	The site comprises a 23 km stretch of the River Blackwater running in a west to east direction between Fermoy and Lismore. It includes the river channel and strips of seasonally flooded grassland within the flood plain. Sandstone ridges parallel to the river confine the area of flooding to a relatively narrow corridor. The lower stretch from Ballyduff to Lismore is more subject to flooding than the upper part. The river channel has a well-developed aquatic community along with emergent swamp vegetation in places. Most of the land above the banks is improved for agriculture with only occasional areas of fringing marshland wet grassland and wet woodland (mostly Salix spp.) still present. Some arable areas occur.

Site Code	Site Name	Quality of Site	Other Site Characteristics
004160	Slieve Bloom Mountains SPA	Supports 3.7% of the all-Ireland population of Circus cyaneus and among the top 5 most important sites in the country for this species. Also, the most easterly population in the country. Habitats are excellent for nesting and foraging purposes. Also has nesting Falco peregrine Falcon columbarius and Lagopus lagopus the later a Red Data Book Species.	The site lies on the Offaly-Laois border and runs along a NE-SW ridge for approximately 25km. Much of the site is over 200 m in altitude with a maximum of 527 m at Arderin. The mountains are of Old Red Sandstone flanked by Silurian rocks. Several important rivers rise within the site including the Barrow Delour and Silver rivers. Approximately 60% of the site is afforested including both first and second rotation plantations and clearfell areas. Roughly one-quarter of the site is unplanted blanket bog and heath with the remainder of the site largely rough grassland that is used for hill farming. Some stands of deciduous woodland and scrub also occur especially within the river valleys.
004165	Slievefelim to Silvermines Mountains SPA	Supports c. 3% of the all-Ireland population of Circus cyaneus and among the top 5 most important sites in the country for the species. Habitat is excellent for both nesting and foraging purposes. Also has nesting Falco peregrinus Falco columbarius and Lapopus lagopus the latter a Red Data Book species. Falco columbarius probably nests but a survey is required.	This is an extensive upland site that occurs in Counties Tipperary and Limerick. Much of the site is over 200 metres in altitude rising to 694 m at Keeper Hill. The site is underlain mainly by Silurian-aged Sandstones. Several important rivers rise within the site including the Mulkear Bilboa and Clare rivers. Approximately half of the site is afforested including both first and second rotation plantations and clear fell areas. Roughly one-quarter of the site is an unplanted blanket bog and heath with both wet and dry heath present. The remainder of the site is largely rough grassland that is used for hill farming. Some stands of deciduous woodland also occur especially in the river valley.
004233	River Nore SPA	The River Nore supports nationally important numbers of Alcedo atthis. Other species which occur within the site include Cygnus olor Anas platyrhynchos Phalacrocorax carbo Ardea cinerea Gallinula chloropus Gallinago gallinago and Riparia riparia.	The River Nore SPA is a long linear site that includes the following river sections: the River Nore from the bridge at Townparks (north-west of Borris in Ossory) to Coolnamuck (approximately 3 km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of Castletown) in Co Laois; the Erkina River from its junction with the River Nore at Durrow Mills to Boston Bridge in Co. Laois; a 1.5 km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its

Site Code	Site Name	Quality of Site	Other Site Characteristics
			junction with the River Nore to a bridge at Mill Island Co. Kilkenny. The site includes the river channel and marginal vegetation.
000231	Barroughter Bog SAC	Barroughter bog is a small, raised bog site which contains good examples of the priority Annex I habitat active raised bog and the non-priority habitats degraded raised bog and depressions on peat substrates (Rhynchosporion). The bog lies along the western shores of Lough Derg and as a result there are some good vegetation transitions between the lake margins and high bog evident. The locally rare plant species Sphagnum pulchrum and Rhynchospora fusca have been recorded from wet pools and lawns on the high bog.	This site is underlain by dark grey muddy fossiliferous carboniferous limestones with a low permeability. The subsoils are dominated by limestone till with calcareous shell marl and pure sand in places. Overall, the limestone till has a low permeability. The bog formed in a floodplain of the adjacent lake and river and lies in a regional ground water discharge area. Upwelling is seen to the NE.
000248	Cloonmoylan Bog SAC	Cloonmoylan Bog is a large, raised bog site which supports very good examples of the Annex I habitats active raised bog bog woodland degraded raised bog and Rhynchosporion vegetation. The site contains one of the largest remaining areas of uncut raised bog surface in east Galway. Of particular ecological note is the presence of large, flushed area in the northern half of the site which contains areas of bog woodland. A number of relatively rare plant species i.e., Frangula alnus and Sphagnum pulchrum have been recorded growing within the site recently and these add to the ecological interest.	This site is predominantly underlain by dark grey muddy fossiliferous carboniferous limestones interbedded with calcareous shales. The Eastern section is underlain by walsortian carboniferous limestone. Both have low permeabilities. A SW/NE fault runs under the site. This is co-incident with a flush. The subsoils are predominately clay rich tills with low permeability. The bog lies in a basin separated from Lough Derg by a bedrock ridge.
000319	Pollnaknockaun Wood Nature Reserve SAC	The site is important since it contains fragments of an ancient woodland which until recently was one of the most extensive in Ireland; the relatively fertile soils support the Coryletosum subassociation of the Blechno-Queretum a relatively rare community type in Ireland. The woodland acts as a refuge for flora and fauna which are otherwise scarce in the locality. Furthermore, the site provides an excellent opportunity to re-create an area of oak woodland.	This site is dominated by coniferous plantations, much of which has been recently clear-felled. Fragments of old oak woodland occur in blocks and bands particularly in the south-western part of the site (which is a nature reserve). Small areas of wet and mixed woodland also occur. The underlying rock is Old Red Sandstone. The soils vary from thin acidic podzols to deeper gleyed brown-earths.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000404	Hugginstown Fen SAC	The site supports an important example of alkaline fen vegetation and is considered one of best sites in the south-east region. It has a diverse vegetation including some scarce plants such as Oenanthe fistulosa. The site is in a fairly natural state and the quality is generally good. Some rare insects have been recorded, notably Lestes dryas and Parhelophilus consimilis. Rana temporaria is common at the site.	The site occupies a narrow low-lying basin on limestone glacial till overlying acid Old Red Sandstone. It comprises a relatively large wetland dominated by swamp and fen vegetation. The wetland has a small catchment and is partly fed by iron rich springs. The northern part of the site is dominated by Phragmites swamp but much of the remainder consists of species-rich fen partly developed on floating mats of Carex diandra with beds of Typha latifolia or Phragmites scattered throughout and especially adjacent to spring areas. Species-rich Junco-Molinion grassland occurs in drained areas at the southern and northern ends of the site and around the margins at the peat-mineral interface. Surrounding land is mainly improved grassland used for pasture.
000407	The Loughans SAC	This turlough is the highest in altitude and also at the SE margin of the range of this habitat - 55km from similar sites by Lough Derg. The vegetation shows relatively little diversity (10 out of a possible 32 types) but includes many plants rare in the county for example it is the only site for Rorippa islandica and Chenopodium rubrum.	The Loughans is a shallow basin surrounded by pasture land with low banks of calcareous drift extending out from the northern side. Some of these carry a species-rich heathy grassland with scattered bushes. There are two shallow ponds with aquatic plants but most of the floor dries out in summer and is grazed. Swallow holes occur in the SE corner and on the western side. The internal channels seem to have no real drainage effect.
000566	All Saints Bog and Esker SAC	This site contains good examples of the Annex I priority habitats active raised bog bog woodland and orchid-rich dry grassland. In addition it contains examples of the non-priority habitats degraded raised bog and Rhynchosporion vegetation. The Betula woodland is of high quality and is the best developed bog woodland of its type in Ireland. The site supports a rich invertebrate fauna including several insect species which are rare in Ireland or found only on this site. Part of the Little Brosna flock of Greenland White-fronted Geese (Anser albifrons flavirostris) may occasionally use the site during disturbance on the Little Brosna Callows. Another species listed on Annex I of the Birds Directive Merlin (Falco columbarius) is also found on the site. The esker grassland on the site supports a large population of the rare	The site is located in an area dominated by low permeability shales which are overlain by ridges of high permeability gravels. One of these runs east/west under the bog to form two basins. The ridge is coincident with the Betula bog woodland. The southern side of the site is bounded by an esker ridge which supports a small area of orchid-rich grassland, and in which are found several gravel quarries one of which supports rare plant species.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		orchid Orchis morio. Other rare plant species Erigeron acer and Galeopsis angustifolia the latter protected in Ireland are found in a quarry on the southern side of the site.	
000646	Galtee Mountains SAC	One of the highest inland mountain ranges in Ireland with extensive areas of dry heath alpine heath montane blanket bog and upland grassland including species-rich nardus grassland. The cliffs above the corries support arctic-alpine vegetation including the Red Data species Cardaminopsis petraea in one of its two Irish localities and several other notable Irish varieties. Site contains two known territories of Falco peregrinus.	An inland mountain range reaching 920m derived from folding of old red sandstone and silurian rocks with a series of small corrie lakes on the northern side and encompassing the headstreams of numerous tributaries of the river Suir. Site includes high level montane blanket bog alpine heath dry heath and montane cliffs.
000930	Clare Glen SAC	An important site for its remnants of old oak wood and an interesting and rich bryoflora including the only station in Ireland for Fissidens exiguus. The ravine includes a population of Trichomanes speciosum.	A steep-sided ravine cut into Old Red Sandstone surrounded by mixed woodland and pockets of old oak wood. The Clare River flows east to west through the ravine and incorporates a series of waterfalls fast-flowing ripples and pool sections. The site is of interest geologically for the stratigraphy of Old Red Sandstone and fossil ripple works.
001430	Glen Bog SAC	The site has an important and fairly extensive example of a type of alluvial woodland (Alnus glutinosa - Carex paniculata community) that is considered genuinely rare in Ireland. The woodland has developed naturally in a former lake basin and is dominated by native species. Its quality is good, and it appears to be functioning in a natural state. The quarry on site supports a pair of Falco peregrinus. Rana temporaria is abundant in the wet woodland.	The site is situated approximately 2 km to the south-east of Lough Gur in Co. Limerick. Glen Bog is now dominated by wet woodland. The woodland does not flood but is permanently waterlogged. In addition to Glen Bog the site includes the summit and southern slopes of Knockderc which rises to 143 m. Knockderc is composed of an igneous intrusive porphyritic rock while the rest of the site is underlain by Lower Carboniferous limestone. Habitats on the hill include scrub bracken and acidic grassland. There is some exposed rock as well as a disused quarry.
001432	Glenstal Wood SAC	The main importance of this site is in the population of Trichomanes speciosum that it holds. The species was first recorded here in 1852; in 1934 it was said to be found here "in more than one spot"; while in 1949 a "fine clump" of the plant was seen. The glen is quite species-rich and supports a rich flora of flowering plants ferns bryophytes and	The site is situated on the western foothills of the Slievefelim Mountains. It comprises stands of oak woodland around Glenstal Castle and Abbey and extending north-eastwards along a narrow glen cut into Old Red Sandstone. The glen is approximately 1.5km long and

Site Code	Site Name	Quality of Site	Other Site Characteristics
		lichens. Prunus padus a threatened species in Ireland was reported from the site in 1881.	narrows at its north-eastern end to a rocky ravine. A small stream runs the length of the glen along its floor.
001858	Galmoy Fen SAC	The site contains a good example of alkaline fen vegetation that has developed partly due to cutting of a former raised bog. Fen habitat is rare in the region. The site contains a typical range of species including Schoenus nigricans and supports the Red Data Book species Rana temporaria and Lepus timidus hibernicus.	Galmoy Fen is situated 7 km north of Johnstown in Co. Kilkenny. It lies in a depression and is underlain by Carboniferous limestone. The central part of the site comprises an area of cutover raised bog with numerous peat-cuttings resulting in a mosaic of dry peat banks and wet peaty pools. The pools have become flooded with base-rich groundwater and now support alkaline fen vegetation. A large area of fen vegetation surrounds the central part of the site; this area has a number of large pools that support calcicole species. Other habitats present on the site include scrub wet grassland, improved grassland dry calcareous grassland and a small area planted with Picea sitchensis. A stream brings water to the site on its north-east side. Surrounding landuse is mainly agricultural.
002147	Lisduff Fen SAC	A small though relatively intact fen system. Petrifying springs with heavy tufa formations occur along the stream in the southern end of the site. An important site for Vertigo geyeri with a series of recent records including confirmed presence in 1995.	Lisduff Fen is located at Kilcoman crossroad approximately 4 km south-east of Birr. The fen system includes areas dominated by Phragmites australis, some wet grassland areas of Betula/Salix scrub and communities tending towards raised bog. There are also some pools. Part of a small stream which enters the fen at the south end is included. Landuse in surrounding areas is mainly pasture for cattle.
002162	River Barrow and River Nore SAC	The site supports many Annexed habitats including the priority habitats of alluvial woodland and petrifying springs. The quality of habitat is generally good. The site also supports a number of Annex II animal species - Salmo salar Margaritifera margaritifera M.m. durrovensis Alosa fallax fallax Austropotamobius pallipes Petromyzon marinus Lutra lutra Lampetra fluviatilis and L. planeri. Annex I Bird species include Anser albifrons flavirostris Falco peregrinus Cygnus cygnus Cygnus columbianus bewickii Limosa lapponica Pluvialis apricaria and Alcedo atthis. A range of rare plants and invertebrates	This site consists of most of the freshwater stretches of the Barrow/Nore River catchments. The Barrow is tidal as far upriver as Graiguenamanagh while the Nore is tidal as far upriver as Inishtioge. The site also includes the extreme lower reaches of the River Suir and all of the estuarine component of Waterford Harbour extending to Creadan Head. The larger of the many tributaries include the Lerr Fushoge Mountain Aughavaud Owenass Boherbaun and Stradbally Rivers of the Barrow and the Delour Dinin Erkina Owveg Munster Arrigle and King's Rivers on the Nore. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains. They traverse limestone

Site Code	Site Name	Quality of Site	Other Site Characteristics
		are found in the woods along these rivers and rare plants are also associated with the saltmarsh.	bedrock for a good proportion of their routes though the middle reaches of the Barrow and many of the eastern tributaries run through Leinster Granite. A wide range of habitats associated with the rivers are included within the site including substantial areas of woodland (deciduous mixed) dry heath wet grassland swamp and marsh vegetation salt marshes a small dune system biogenic reefs and intertidal sand and mud flats. Areas of improved grassland arable land and coniferous plantations are included in the site for water quality reasons.
002170	Blackwater River (Cork/Waterford) SAC	The site supports important examples of a range of Annex I habitats, notably estuaries intertidal mudflats and sandflats perennial vegetation of stony banks salt meadows floating river vegetation alluvial forests and oak woodlands. Most of these are of good quality and extensive in area. The Blackwater system is an important salmonid fishery and is of high conservation value for Salmo salar. Also supports important populations of Lampetra planeri L. fluviatilis Petromyzon marinus and Alosa fallax fallax. Substantial populations of Margaritifera margaritifera occur while Austropotamobius pallipes is found in the Awbeg River. Lutra lutra is widespread throughout the site and has been subject to detailed surveys. Trichomanes speciosum occurs at one location. Annex I bird species present in the site include breeding Egretta garzetta Alcedo atthis and Falco peregrinus and wintering cygnus cygnus and Pluvialis apricaria. A good diversity of other winter waterfowl species also occurs.	The River Blackwater is one of the largest rivers in Ireland draining a major part of Co. Cork and parts of Cos. Kerry Limerick Tipperary and Waterford. The site consists of most of the freshwater stretches of the system as well as the estuarine component at Youghal. Tidal influence extends almost to Cappoquin. The Blackwater rises in the east Kerry uplands where Namurian grits and shales build the low heather-covered plateaux. In the lowlands in the Mallow district, it passes over limestone and later cuts through ridges of Old Red Sandstone to the south of Cappoquin. Main tributaries include the Rivers Lickey Bride Allow and Awbeg. A wide range of habitats associated with the rivers are included within the site including substantial areas of woodland (deciduous mixed) scrub wet grassland swamp and marsh vegetation bog salt marshes and intertidal sand and mud flats. Areas of improved grassland arable land and coniferous plantations are included in the site for water quality reasons.
002241	Lough Derg North-East Shore SAC	This site supports a wide range of habitats including Alkaline fens Juniper scrub formations limestone pavement Yew woodlands alluvial woodlands and Cladium fen. It also supports the only known population in the country for the Irish Red Data Book species Inula salicina. Other scarce plant species found here include Sorbus aria and Rhamnus catharticus. The endangered fish species Coregonus	This site incorporates part of the water body of Lough Derg and includes most of the northern lake shore and approximately one-third of the northeast shoreline. Lough Derg itself is the lowest order lake on the River Shannon and is one of the largest freshwater bodies in Ireland.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		autumnalis has its European stronghold in Lough Derg. The open water areas of the lake itself are important for wintering wildfowl. Goat island holds a breeding colony of Sterna hirundo. A subflock of Anser albifrons flavirostris uses the callow lands around Slevoir Bay in Winter. A good population of Cygnus olor occurs.	Most of the lake overlies Carboniferous Limestone which outcrops along the shores, but some old Red Sandstone occurs on the eastern side. The site is of high scenic value and is a well-known angling and tourism area.
002257	Moanour Mountain SAC	This site supports good examples of heath vegetation typical for the region.	The site occurs on the north-western slope of Moanour Mountain, an outlying ridge of the Galtee Mountains. Much of the remainder of this mountainous ridge has been afforested. A fine altitudinal transition is seen from upland acid grassland on mineral soil at the lower elevations to wet and dry heaths on peats higher up. The wet heath grades into incipient blanket bog at the highest level. The only landuse in the site is grazing by sheep.
002333	Knockacoller Bog SAC	Although Knockacoller Bog is a relatively small, raised bog site it does occur close to the southern limit of raised bog development and thus is important from a biogeographical perspective. Sphagnum growth is good in the central active area and includes the relatively rare species S. imbricatum and S. fuscum. Some pools are present. The part of the high bog that is classified as degraded is rather dry and often has a uniform vegetation dominated by Calluna vulgaris or Narthecium ossifragum. Rhynchosporion vegetation is largely confined to the active central core of the bog but supports the relatively rare Rhynchospora fusca. Knockacoller Bog together with Coolrain Bog which lies 4 km to the west forms an important southerly outpost for raised bog distribution.	Knockacoller Bog is a small midland raised bog situated 5 km south-west of Mountrath village Co. Laois. The bog overlies sandy calcareous till which in turn overlies Carboniferous limestone bedrock. Uncut high bog accounts for approximately 40% of the site area with cutover surface dominating the remainder. The uncut bog surface contains a wet central active area which may have arisen due to slumping of the surface. Part of the cutover has been colonised by Betula pubescens scrub and woodland (10-12m high) which adds to habitat diversity. A small part of the cutover has been reclaimed for grassland.
004028	Blackwater Estuary SPA	The Blackwater Estuary is of high ornithological importance for wintering waterfowl providing good quality feeding areas for a diversity of waterfowl species. At high tide the birds roost along the shoreline and salt marsh fringe. The site supports an internationally important population of Limosa limosa (over 5% of the national total). It supports a further eight species in numbers of national importance: Tadorna tadorna Anas penelope Pluvialis apricaria Vanellus vanellus	The Blackwater Estuary SPA is a relatively small, sheltered south-facing estuary which extends from below Youghal Bridge to the Ferry Point peninsula close to where the river enters the sea. It comprises a section of the main channel of the River Blackwater. At low tide intertidal flats are exposed. On the eastern side the intertidal channel extending as far as Kinsalebeg and Moord Cross Roads is included while on the west side the site includes much of the estuary of the

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Calidris alpina Numenius arquata Tringa totanus and Tringa nebularia. A population of Limosa lapponica exceeds the threshold for national importance in some winters. Egretta garzetta breeds locally and the Blackwater Estuary is a main feeding area. The site is important for gulls and attracts substantial numbers of Larus fuscus in autumn and winter. The Blackwater Estuary has been well-studied with waterfowl counts extending back to 1974.	Tourig River. The intertidal sediments are mostly muds or sandy muds reflecting the sheltered conditions of the estuary. The sediments have a macrofauna typical of muddy sands with polychaete worms and bivalves well-represented. Salt marshes occur along the sheltered inlets. A low-lying field which provides an important roost is included.
004097	River Suck Callows SPA	The River Suck Callows is an important site for wintering waterfowl with an internationally important population of Anser albifrons flavirostris centred within the site. This is one of the largest flocks in the country outside of the Wexford Slobs. Despite poor survey data for recent years, it is known that at least three species have populations of national importance: Cygnus cygnus Anas penelope and Vanellus vanellus. Cygnus columbarius bewickii formerly occurred in significant numbers but has abandoned the site in line with a marked contraction of range at a national level. Crex crex formerly bred but not since the early 1990s. This site provides one of the few remaining examples in the country of a large river system of which parts still flood in a fairly natural way.	The River Suck is the largest tributary of the River Shannon. The site follows the river from Castlecoote near Fuerty to its confluence with the River Shannon a distance of approximately 70 km of river course. The main habitat is grassland improved to varying extents that is seasonally flooded. The less improved areas are species-rich. The grassland is used mainly for pasture, but some is used for silage or occasionally hay-making. The river channel is fringed in places by swamp and marsh vegetation. The site adjoins several raised bogs and cutover bogs and there are turloughs in the vicinity.
004103	All Saints Bog SPA	Site is an important raised bog site with good examples of active raised bog degraded raised bog Rhynchoporian vegetation as well as orchid-rich calcareous grassland. All Saints Bog was formerly an important refuge for part of the internationally important population of Anser albifrons flavirostris based on the Little Brosna. The geese would utilise the bog when disturbed from the callows. In recent years however there has been less use of All Saint's following a general trend of less usage of raised bogs and also probably due to disturbance from peat milling activities on the bog adjacent to the site. Falco columbarius has been seen on the bog during the breeding	Site is a raised bog complex with a well-developed area of active bog which is surrounded by degraded raised bog and some cutaway bog. The bog supports an extensive stand of Betula pubescens woodland. The southern side of the site is bounded by an esker ridge which supports a small area of dry calcareous grassland. The geology of the area is dominated by low permeability shales which are overlain by ridges of high permeability gravels. One of these ridges runs east-west under the bog causing it to form two basins. The ridge is co-incident with the birch woodland.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		season and probably nests. The site supports several rare invertebrate species, and the esker ridge supports three Red Data plant species.	
004168	Slieve Aughty Mountains SPA	The site supports over 12% of the all Ireland population of Circus cyaneus and is among the top five sites in the country for this species. It provides an excellent habitat for both nesting and foraging. The site also supports a breeding population Falco columbarius. The population size is not well known but is likely to exceed five pairs. Lagopus lagopus is found on many of the unplanted areas of bog and heath - this is a species that has declined in Ireland and is now Red-listed	The Slieve Aughty Mountains SPA is a very large site that extends southwards from just south of Loughrea County Galway to Scarriff in County Clare. The peaks are not notably high or indeed pronounced; this site rises to a maximum of 400 m at Maghera west of Lough Graney. The site includes many small- and medium-sized lakes, notable Lough Graney and Lough Atorick; several important rivers rise in the site including the Owendalulleegh and Graney. Lough Derg occurs immediately to the south-east. The Slieve Aughty mountains are predominantly comprised of Old Red Sandstone, but outliers of Lower Palaeozoic rocks provide occasional outcrops capping the hills. The site consists of a variety of upland habitats though approximately half is afforested. The coniferous forests include first and second rotation plantations with both pre-thicket and post-thicket stands present. Substantial areas of clear-fell are also present at any one time. Almost one-third of the site is unplanted blanket bog and heath with both wet and dry heath present. Well-developed blanket bog occurs at several locations, notable Sonnagh Loughatorick South and Glendree. The remainder of the site is mostly rough grassland that is used for hill farming.

Appendix 1 - Table 2 Background data for European sites considered in the assessment; including the Qualifying features (Qualifying Interests or Special Conservation Interests) and the known threats and pressures as recorded by the National Parks and Wildlife Services

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000030	Danes Hole, Poulnalecka SAC	Caves not open to the public [8310], Lesser horseshoe bat (Rhinolophus hipposideros) [1303], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	D05, M02.03, B06, A10.01, B01.01	Improved access to site, Decline or extinction of species, Grazing in forests or woodland, Removal of hedges and copses or scrub, Forest planting on open ground (native trees)
000216	River Shannon Callows SAC	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Otter (Lutra lutra) [1355], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Alkaline fens [7230], Limestone pavements [8240]	G01, K03.04, C01.03.02, A03, J02.05, A04.03, J02.04.01, A07, A10.01, A03.03, J02.01, B02.02, A08, J02.05.02, J02.11, F03.01, D01.01, A04.01, A04.02.05, G05.01, B06	Outdoor sports and leisure activities, recreational activities, Predation, Mechanical removal of peat, Mowing or cutting of grassland, Modification of hydrographic functioning, general, Abandonment of pastoral systems lack of grazing, Flooding, Use of biocides, hormones and chemicals, Removal of hedges and copses or scrub, Abandonment or lack of mowing , Landfill, land reclamation and drying out, general, Forestry clearance, Fertilisation, Modifying structures of inland water courses, Siltation rate changes, dumping, depositing of dredged deposits, Hunting, Paths, tracks, cycling tracks, Intensive grazing, Non intensive mixed animal grazing, Trampling, overuse, Grazing in forests or woodland
000231	Barroughter Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	D05, C01.03.02, B01, J02.15, E03.03, E03.01, J02.10, X, J01.01	Improved access to site, Mechanical removal of peat, Forest planting on open ground, Other human induced changes in hydraulic conditions, Disposal of inert materials, Disposal of household or recreational facility waste, Management of aquatic and bank vegetation for drainage purposes, no threats or pressures, Burning down
000248	Cloonmoylan Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0], Depressions on peat substrates of the Rhynchosporion [7150]	B02.02, J01, A04.02.04, A04.01.01, A01, A08, B01, C01.03.02, D05,	Forestry clearance, Fire and fire suppression, non intensive goat grazing, Intensive cattle grazing, Cultivation, Fertilisation, Forest planting on open ground, Mechanical

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
			A03, B02.01.02, A04	removal of peat, Improved access to site, Mowing or cutting of grassland, Forest replanting (non native trees), Grazing
000261	Derrycrag Wood Nature Reserve SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	B06, B, I01, J01, A04.02, D01.01	Grazing in forests or woodland, Sylviculture, forestry, Invasive non-native species, Fire and fire suppression, non intensive grazing, Paths, tracks, cycling tracks
000308	Loughatorick South Bog SAC	Blanket bogs * if active bog [7130]	B02, A04, B01, G01.03.02, J01, H05.01, C01.03.02, G01.02, X, C01.01.01, F03.01, A05.02	Forest and Plantation management & use, Grazing, Forest planting on open ground, Off-road motorized driving, Fire and fire suppression, Garbage and solid waste, Mechanical removal of peat, Walking, horseriding and non-motorised vehicles, No threats or pressures, Sand and gravel quarries, Hunting, Stock feeding
000319	Pollnaknockaun Wood Nature Reserve SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	B, B06, J01, X, A04.02.04, A04.01.01, B03	Sylviculture, forestry, Grazing in forests or woodland, Fire and fire suppression, No threats or pressures, non intensive goat grazing, Intensive cattle grazing, Forest exploitation without replanting or natural regrowth
000404	Hugginstown Fen SAC	Alkaline fens [7230]	A08, B02, A04	Fertilisation, Forest and Plantation management & use, Grazing
000407	The Loughans SAC	Turloughs [3180]	A04.01.01, A04, A08	Intensive cattle grazing, Grazing, Fertilisation
000412	Slieve Bloom Mountains SAC	Blanket bogs * if active bog [7130], Northern Atlantic wet heaths with Erica tetralix [4010], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	G05.01, H05.01, K02.01, J01.01, A04.03, G01.02, J02.15, G01.03.02, B02, C01, I01, B02.02	Trampling, overuse, Garbage and solid waste, Species composition change (succession), Burning down, Abandonment of pastoral systems lack of grazing, Walking, horseriding and non-motorised vehicles, Other human induced changes in hydraulic conditions, Off-road motorized driving, Forest and Plantation management & use, Mining and quarrying, Invasive non-native species, Forestry clearance.

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000566	All Saints Bog and Esker SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Bog woodland [91D0], Depressions on peat substrates of the Rhynchosporion [7150]	A08, J01.01, A05.02, J02.10, E03.01, E05, C01.03, J02.15, A04, C01.01, E03.03	Fertilisation, Burning down, Stock feeding, Management of aquatic and bank vegetation for drainage purposes, Disposal of household or recreational facility waste, Storage of materials, Peat extraction, Other human induced changes in hydraulic conditions, Grazing, Sand and gravel extraction , Disposal of inert materials
000585	Sharavogue Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	J02.15, B02.02, A08, J01.01, I02	Other human induced changes in hydraulic conditions, Forestry clearance, Fertilisation, Burning down, Problematic native species
000641	Ballyduff/Clonfinane Bog SAC	Bog woodland [91D0], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	A08, C01.03.02, A04, A03, A10, C01.03, A01, J01, D05	Fertilisation, Mechanical removal of peat, Grazing, Mowing or cutting of grassland, Restructuring agricultural land holding, Peat extraction, Cultivation, Fire and fire suppression, Improved access to site
000646	Galtee Mountains SAC	Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], European dry heaths [4030], Blanket bogs * if active bog [7130], Calcareous rocky slopes with chasmophytic vegetation [8210], Siliceous rocky slopes with chasmophytic vegetation [8220], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], Alpine and Boreal heaths [4060], Northern Atlantic wet heaths with Erica tetralix [4010]	A10.01, G01.03.02, X, G01.04.01, J02.11, G01.02, A04.01.02, J01	Removal of hedges and copses or scrub, Off-road motorized driving, no threats or pressures, Mountaineering & rock climbing, Siltation rate changes, dumping, depositing of dredged deposits, Walking, horseriding and non-motorised vehicles, Intensive sheep grazing, Fire and fire suppression
000647	Kilcarren-Firville Bog SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	A10, D01.02, A03, B01, A08, J01, C01.03, A04	Restructuring agricultural land holding, Roads, motorways, Mowing or cutting of grassland, Forest planting on open ground, Fertilisation, Fire and fire suppression, Peat extraction, Grazing

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000668	Nier Valley Woodlands SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	A04, X, I01, B	Grazing, No threats or pressures, Invasive non-native species, Sylviculture, forestry
000831	Cullahill Mountain SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04.03, A10.01, A03.02	Abandonment of pastoral systems lack of grazing, Removal of hedges and copses or scrub, non intensive mowing
000849	Spahill and Clomantagh Hill SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04.01, A10.01, A08, X	Intensive grazing, Removal of hedges and copses or scrub, Fertilisation, No threats or pressures
000919	Ridge Road, SW of Rapemills SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A05.02, A04.03, J01.01, A02.01, A08, A04.01, K02.01, A10.01, A07, D01	Stock feeding, Abandonment of pastoral systems lack of grazing, Burning down, Agricultural intensification, Fertilisation, Intensive grazing, Species composition change (succession), Removal of hedges and copses or scrub, Use of biocides, hormones and chemicals, Roads, paths and railroads
000930	Clare Glen SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Killarney fern (Trichomanes speciosum) [1421]	J02.11, X, G01, I01, B02.02, B02.04	Siltation rate changes, dumping, depositing of dredged deposits, no threats or pressures, Outdoor sports and leisure activities, recreational activities, Invasive non-native species, Forestry clearance, Removal of dead and dying trees
000934	Kilduff, Devilsbit Mountain SAC	Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], European dry heaths [4030]	A10, G01.02, G01.04.01, H05.01, F03.02.02, G02.09	Restructuring agricultural land holding, Walking, horseriding and non-motorised vehicles, Mountaineering & rock climbing, Garbage and solid waste, taking from nest (e.g., falcons), Wildlife watching
000939	Silvermine Mountains SAC	Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Northern Atlantic wet heaths with Erica tetralix [4010]	A04.01, M02.01, A04.02.01	Intensive grazing, Habitat shifting and alteration, non intensive cattle grazing

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
001013	Glenomra Wood SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	D02.01, G05.06, B02, D05, B06, E01.03, A10.01	Electricity and phone lines, Tree surgery, felling for public safety, removal of roadside trees, Forest and Plantation management & use, Improved access to site, Grazing in forests or woodland, Dispersed habitation, Removal of hedges and copses or scrub.
001197	Keeper Hill SAC	Northern Atlantic wet heaths with Erica tetralix [4010], Blanket bogs * if active bog [7130]	D02.03, D01.01, G01.03.01, K01.01, G01.03.02, X	Communication masts and antennas, Paths, tracks, cycling tracks, Regular motorized driving, Erosion, Off-road motorized driving, No threats or pressures.
001313	Rosturra Wood SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	B, X, B06, A04, J01	Sylviculture, forestry, no threats or pressures, Grazing in forests or woodland, Grazing, Fire and fire suppression.
001430	Glen Bog SAC	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	J02, X, F05.05	Human induced changes in hydraulic conditions, no threats or pressures, Shooting.
001432	Glenstal Wood SAC	Killarney fern (Trichomanes speciosum) [1421]	I01, B02.03, K02.01	Invasive non-native species, Removal of forest undergrowth, Species composition change (succession).
001683	Liskeenan Fen SAC	Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]	A04, A08, C01.03.01, I01	Grazing, Fertilisation, Hand cutting of peat, Invasive non-native species.
001847	Philipston Marsh SAC	Transition mires and quaking bogs [7140]	A08, X, A04, B	Fertilisation, No threats or pressures, Grazing, Sylviculture, forestry.
001858	Galmoy Fen SAC	Alkaline fens [7230]	C01.04.02, A04, X, B	Underground mining, Grazing, No threats or pressures, Sylviculture, forestry.
001952	Comeragh Mountains SAC	Siliceous rocky slopes with chasmophytic vegetation [8220], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Slender green feather-moss (Hamatocaulis vernicosus) [6216], European dry heaths [4030], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	D01.02, E02, A04, G01.02, B, K01.01, E06, J01, C01.03, I01	Roads, motorways, Industrial or commercial areas, Grazing, Walking, horseriding and non-motorised vehicles, Sylviculture, forestry, Erosion, Other urbanisation, industrial and similar activities, Fire and fire suppression, Peat extraction, Invasive non-native species.

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		[8110], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Blanket bogs * if active bog [7130], Northern Atlantic wet heaths with Erica tetralix [4010], Calcareous rocky slopes with chasmophytic vegetation [8210], Alpine and Boreal heaths [4060]		
002124	Bolingbrook Hill SAC	European dry heaths [4030], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Northern Atlantic wet heaths with Erica tetralix [4010]	X, G05.07, D01.01, A10.01, B02, J01	No threats or pressures, Missing or wrongly directed conservation measures, Paths, tracks, cycling tracks, Removal of hedges and copses or scrub, Forest and Plantation management & use, Fire and fire suppression
002125	Anglesey Road SAC	Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230]	X, A08, B, A02	No threats or pressures, Fertilisation, Sylviculture, forestry, Modification of cultivation practices
002126	Pollagoona Bog SAC	Blanket bogs * if active bog [7130]	L10, J02, B02.02, J01.01	Other natural catastrophes, Human induced changes in hydraulic conditions, Forestry clearance, Burning down
002137	Lower River Suir SAC	Otter (Lutra lutra) [1355], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Twaite shad (Alosa fallax) [1103], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], River lamprey (Lampetra fluviatilis) [1099], Brook lamprey (Lampetra planeri) [1096], Sea lamprey (Petromyzon marinus) [1095], Freshwater pearl mussel (Margaritifera margaritifera) [1029], White-clawed crayfish (Austropotamobius pallipes) [1092], Mediterranean salt meadows (Juncetalia maritimi)	A01, H01, E03, B, I01, J02.12.02, X, J02.01.02, A08, D03.01, J02.01, E01	Cultivation, Pollution to surface waters (limnic & terrestrial, marine & brackish), Discharges, Sylviculture, forestry, Invasive non-native species, dykes and flooding defense in inland water systems, no threats or pressures, Reclamation of land from sea, estuary or marsh, Fertilisation, Port areas, Landfill, land reclamation and drying out, eneral, Urbanised areas, human habitation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		[1410], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Taxus baccata woods of the British Isles [91J0], Atlantic salmon (Salmo salar) [1106]		
002147	Lisduff Fen SAC	Geyer`s whorl snail (Vertigo geyeri) [1013], Alkaline fens [7230], Petrifying springs with tufa formation (Cratoneurion) [7220]	A02.01, E03.01, X, A07, E05, A08, E03.03, J02.10, C01, A04.03	Agricultural intensification, Disposal of household or recreational facility waste, No threats or pressures, Use of biocides, hormones and chemicals, Storage of materials, Fertilisation, Disposal of inert materials, Management of aquatic and bank vegetation for drainage purposes, Mining and quarrying, Abandonment of pastoral systems lack of grazing
002162	River Barrow and River Nore SAC	Freshwater pearl mussel (Margaritifera margaritifera) [1029], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], White-clawed crayfish (Austropotamobius pallipes) [1092], Salicornia and other annuals colonising mud and sand [1310], Killarney fern (Trichomanes speciosum) [1421], Estuaries [1130], Desmoulin`s whorl snail (Vertigo moulinsiana) [1016], Atlantic salmon (Salmo salar) [1106], Nore Pearl Mussel (Margaritifera durrovensis) [1990], Sea lamprey (Petromyzon marinus) [1095], European dry heaths [4030], Petrifying springs with tufa formation (Cratoneurion) [7220], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Otter (Lutra lutra) [1355], Twaite shad (Alosa fallax) [1103], Brook lamprey (Lampetra planeri) [1096], Mediterranean salt meadows (Juncetalia maritimi) [1410], Mudflats and sandflats not covered by seawater at low tide [1140], River lamprey (Lampetra fluviatilis) [1099], Reefs [1170], Water	J02.12.02, D03.01, J02.06, J03.02.01, C01.01.01, A04.01.01, F02, B02, B07, B05, A02.01, B02.01.01, K01.01, J02.02.01, F01.01, F02.01.02, H01, A10.01, F02.03, J02.05.02, M01, I01, C01.03, J02, E02	Dykes and flooding defense in inland water systems, Port areas, Water abstractions from surface waters, Reduction in migration or migration barriers, Sand and gravel quarries, Intensive cattle grazing, Fishing and harvesting aquatic ressources, Forest and Plantation management & use, Forestry activities not referred to above, Use of fertilizers (forestry), Agricultural intensification, Forest replanting (native trees), Erosion, Dredging or removal of limnic sediments, Intensive fish farming, intensification , Netting, Pollution to surface waters (limnic & terrestrial, marine & brackish), Removal of hedges and copses or scrub, Leisure fishing, Modifying structures of inland water courses, Changes in abiotic conditions, Invasive non-native species, Peat extraction, Human induced changes in hydraulic conditions, Industrial or commercial areas

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]		
002165	Lower River Shannon SAC	River lamprey (Lampetra fluviatilis) [1099], Brook lamprey (Lampetra planeri) [1096], Reefs [1170], Large shallow inlets and bays [1160], Mediterranean salt meadows (Juncetalia maritimi) [1410], Sandbanks which are slightly covered by sea water all the time [1110], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Estuaries [1130], Coastal lagoons [1150], Perennial vegetation of stony banks [1220], Bottlenose dolphin (Tursiops truncatus) [1349], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Otter (Lutra lutra) [1355], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Atlantic salmon (Salmo salar) [1106], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Sea lamprey (Petromyzon marinus) [1095]	G01.01, E01, B, J02.01.02, D01.01, A08, C01.03.01, A04, F02.03, K02.03, I01, H04, F01, F03.01, J02.10, J02.01.01, E03, C01.01.02, J02.12.01	Nautical sports, Urbanised areas, human habitation, Sylviculture, forestry, Reclamation of land from sea, estuary or marsh, Paths, tracks, cycling tracks, Fertilisation, Hand cutting of peat, Grazing, Leisure fishing, Eutrophication (natural), Invasive non-native species, Air pollution, air-borne pollutants, Marine and Freshwater Aquaculture, Hunting, Management of aquatic and bank vegetation for drainage purposes, Polderisation, Discharges, Removal of beach materials, Sea defense or coast protection works, tidal barrages

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002170	Blackwater River (Cork/Waterford) SAC	White-clawed crayfish (Austropotamobius pallipes) [1092], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Estuaries [1130], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Twaite shad (Alosa fallax) [1103], Salicornia and other annuals colonising mud and sand [1310], Sea lamprey (Petromyzon marinus) [1095], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Killarney fern (Trichomanes speciosum) [1421], Atlantic salmon (Salmo salar) [1106], Perennial vegetation of stony banks [1220], Brook lamprey (Lampetra planeri) [1096], Otter (Lutra lutra) [1355], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Mediterranean salt meadows (Juncetalia maritimi) [1410], Mudflats and sandflats not covered by seawater at low tide [1140], River lamprey (Lampetra fluviatilis) [1099], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	J02.01, I01, B, F02.03, K01.01, A04, D01.02, E01, C01.01, G02, A08, E03.01, A03, E02, G01.01, D01.04	Landfill, land reclamation and drying out, general, Invasive non-native species, Sylviculture, forestry, Leisure fishing, Erosion, Grazing, Roads, motorways, Urbanised areas, human habitation, Sand and gravel extraction , Sport and leisure structures, Fertilisation, Disposal of household or recreational facility waste, Mowing or cutting of grassland, Industrial or commercial areas, Nautical sports, Railway lines, TGV
002206	Scohaboy (Sopwell) Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	I02, J02.15, J01, I01, B02.02, J02.01, C01.03.02, J01.02, C01.03	Problematic native species, Other human induced changes in hydraulic conditions, Fire and fire suppression, Invasive non-native species, Forestry clearance, Landfill, land reclamation and drying out, general, Mechanical removal of peat, Supression of natural fires, Peat extraction
002207	Arragh More (Derrybreen) Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	I02, C01.03.02, B02.02, I01, J02.01, J02.15, J01.01	Problematic native species, Mechanical removal of peat, Forestry clearance, Invasive non-native species, Landfill, land reclamation and drying out, general, Other human induced changes in hydraulic conditions, Burning down

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002236	Island Fen SAC	Juniperus communis formations on heaths or calcareous grasslands [5130], Alkaline fens [7230]	D01, C01, K02.01, A04.03, J01.01, A04.01, F03.01, X	Roads, paths and railroads, Mining and quarrying, Species composition change (succession), Abandonment of pastoral systems lack of grazing, Burning down, Intensive grazing, Hunting, No threats or pressures
002241	Lough Derg, North-East Shore SAC	Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Juniperus communis formations on heaths or calcareous grasslands [5130], Limestone pavements [8240], Taxus baccata woods of the British Isles [91J0], Alkaline fens [7230]	A10.01, K02.01, H01.08, A04.01, A04.02.05, J02.01.03, H01, J02.10, K02.03, M01.02, M01.03, G01, A08, B02.01.01, D01.01, C01, I01, J02, I02, D03.01.02, G02.09, M01.01	Removal of hedges and copses or scrub, Species composition change (succession), Diffuse pollution to surface waters due to household sewage and waste waters, Intensive grazing, Non intensive mixed animal grazing, Infilling of ditches, dykes, ponds, pools, marshes or pits, Pollution to surface waters (limnic & terrestrial, marine & brackish), Management of aquatic and bank vegetation for drainage purposes, Eutrophication (natural), Droughts and less precipitations, Flooding and rising precipitations, Outdoor sports and leisure activities, recreational activities, Fertilisation, Forest replanting (native trees), Paths, tracks, cycling tracks, Mining and quarrying, Invasive non-native species, Human induced changes in hydraulic conditions, Problematic native species, Piers or tourist harbours or recreational piers, Wildlife watching, Temperature changes (e.g. rise of temperature & extremes)
002257	Moanour Mountain SAC	Northern Atlantic wet heaths with Erica tetralix [4010], European dry heaths [4030]	G01.02, A04, B	Walking, horseriding and non-motorised vehicles, Grazing, Sylviculture, forestry
002258	Silvermines Mountains West SAC	European dry heaths [4030], Calaminarian grasslands of the Violetalia calaminariae [6130], Northern Atlantic wet heaths with Erica tetralix [4010]	A04.02.04, A04.02.03, X, C01.04, G01.03, D01.01, J01, G01.02	Non intensive goat grazing, non intensive horse grazing, no threats or pressures, Mines, Motorised vehicles, Paths, tracks, cycling tracks, Fire and fire suppression, Walking, horseriding and non-motorised vehicles
002312	Slieve Bernagh Bog SAC	Northern Atlantic wet heaths with Erica tetralix [4010], Blanket bogs * if active bog [7130], European dry heaths [4030]	G01.03.02, J01, A04, A04.03, C01.01, C01.03.02, J02.01, B02,	Off-road motorized driving, Fire and fire suppression, Grazing, Abandonment of pastoral systems lack of grazing, Sand and gravel extraction , Mechanical removal of peat, Landfill, land reclamation and drying out, general, Forest

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
			G05.01, D01.01, G01.02	and Plantation management & use, Trampling, overuse, Paths, tracks, cycling tracks, Walking, horseriding and non-motorised vehicles
002324	Glendine Wood SAC	Killarney fern (Trichomanes speciosum) [1421]	K05, B, D01.02, E01.03, A04	Reduced fecundity or genetic depression, Sylviculture, forestry, Roads, motorways, Dispersed habitation, Grazing
002332	Coolrain Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	B, J02.15, J02.01, C01.03.02, J01.01, H05.01, J02.05, I01	Sylviculture, forestry, Other human induced changes in hydraulic conditions, Landfill, land reclamation and drying out, general, Mechanical removal of peat, Burning down, Garbage and solid waste, Modification of hydrographic functioning, general, Invasive non-native species
002333	Knockacoller Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	J02.15, A04.02.03, C01, J01.01, K02	Other human induced changes in hydraulic conditions, non intensive horse grazing, Mining and quarrying, Burning down, Biocenotic evolution, succession
002353	Redwood Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	A01, C01.03, J01, D01.01, X, D01.02	Cultivation, Peat extraction, Fire and fire suppression, Paths, tracks, cycling tracks, No threats or pressures, Roads, motorways
002356	Ardgraigue Bog SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	E03.01, J02.15, J02.07, C01.03.02, A02.01, B02.01.02, J02.06, E03.03, J01.01, X	Disposal of household or recreational facility waste, Other human induced changes in hydraulic conditions, Water abstractions from groundwater, Mechanical removal of peat, Agricultural intensification, Forest replanting (nonnative trees), Water abstractions from surface waters, Disposal of inert materials, Burning down, No threats or pressures
004028	Blackwater Estuary SPA	Redshank (Tringa totanus) [A162], Wigeon (Anas penelope) [A050], Black-tailed Godwit (Limosa limosa) [A156], Curlew (Numenius arquata) [A160], Wetland and Waterbirds [A999], Lapwing (Vanellus vanellus) [A142], Bar-tailed Godwit (Limosa lapponica) [A157],	F03.01, F02.03, A08, A04, G01.01, D01.02, E01	Hunting, Leisure fishing, Fertilisation, Grazing, Nautical sports, Roads, motorways, Urbanised areas, human habitation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		Dunlin (Calidris alpina) [A149], Golden Plover (Pluvialis apricaria) [A140]		
004032	Dungarvan Harbour SPA	Wetland and Waterbirds [A999], Lapwing (Vanellus vanellus) [A142], Dunlin (Calidris alpina) [A149], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Red-breasted Merganser (Mergus serrator) [A069], Oystercatcher (Haematopus ostralegus) [A130], Redshank (Tringa totanus) [A162], Great Crested Grebe (Podiceps cristatus) [A005], Shelduck (Tadorna tadorna) [A048], Knot (Calidris canutus) [A143], Bar-tailed Godwit (Limosa lapponica) [A157], Golden Plover (Pluvialis apricaria) [A140], Black-tailed Godwit (Limosa limosa) [A156], Turnstone (Arenaria interpres) [A169], Grey Plover (Pluvialis squatarola) [A141], Curlew (Numenius arquata) [A160]	F01, F02.03, A08, E01, G01.02	Marine and Freshwater Aquaculture, Leisure fishing, Fertilisation, Urbanised areas, human habitation, Walking, horseriding and non-motorised vehicles
004058	Lough Derg (Shannon) SPA	Cormorant (Phalacrocorax carbo) [A017], Wetland and Waterbirds [A999], Common tern (Sterna hirundo) [A193], Goldeneye (Bucephala clangula) [A067], Tufted Duck (Aythya fuligula) [A061]	F02.03, F03.01, G01.01, A08	Leisure fishing, Hunting, Nautical sports, Fertilisation
004077	River Shannon and River Fergus Estuaries SPA	Whooper Swan (Cygnus cygnus) [A038], Pintail (Anas acuta) [A054], Lapwing (Vanellus vanellus) [A142], Ringed Plover (Charadrius hiaticula) [A137], Black-headed Gull (Chroicocephalus ridibundus) [A179], Greenshank (Tringa nebularia) [A164], Grey Plover (Pluvialis squatarola) [A141], Shoveler (Anas clypeata) [A056], Redshank (Tringa totanus) [A162], Black-tailed Godwit (Limosa limosa) [A156], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Knot (Calidris canutus) [A143], Dunlin (Calidris alpina) [A149], Bar-tailed Godwit (Limosa lapponica) [A157], Cormorant (Phalacrocorax carbo) [A017], Teal (Anas crecca)	E02, E03, G01.01, F01, A08, D03.02, E01	Industrial or commercial areas, Discharges, Nautical sports, Marine and Freshwater Aquaculture, Fertilisation, Shipping lanes, Urbanised areas, human habitation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		[A052], Curlew (Numenius arquata) [A160], Golden Plover (Pluvialis apricaria) [A140], Wetland and Waterbirds [A999], Wigeon (Anas penelope) [A050], Shelduck (Tadorna tadorna) [A048], Scaup (Aythya marila) [A062]		
004086	River Little Brosna Callows SPA	Golden Plover (Pluvialis apricaria) [A140], Shoveler (Anas clypeata) [A056], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Wigeon (Anas penelope) [A050], Pintail (Anas acuta) [A054], Black-headed Gull (Chroicocephalus ridibundus) [A179], Lapwing (Vanellus vanellus) [A142], Teal (Anas crecca) [A052], Wetland and Waterbirds [A999], Black-tailed Godwit (Limosa limosa) [A156], Whooper Swan (Cygnus cygnus) [A038]	F02.03, A08, A04, D01.01, E01.03, A03, F03.01	Leisure fishing, Fertilisation, Grazing, Paths, tracks, cycling tracks, Dispersed habitation, Mowing or cutting of grassland, Hunting
004094	Blackwater Callows SPA	Wigeon (Anas penelope) [A050], Wetland and Waterbirds [A999], Black-tailed Godwit (Limosa limosa) [A156], Whooper Swan (Cygnus cygnus) [A038], Teal (Anas crecca) [A052]	A04, E01, A08, F02.03	Grazing, Urbanised areas, human habitation, Fertilisation, Leisure fishing
004096	Middle Shannon Callows SPA	Golden Plover (Pluvialis apricaria) [A140], Wigeon (Anas penelope) [A050], Black-headed Gull (Chroicocephalus ridibundus) [A179], Lapwing (Vanellus vanellus) [A142], Whooper Swan (Cygnus cygnus) [A038], Corncrake (Crex crex) [A122], Wetland and Waterbirds [A999], Black-tailed Godwit (Limosa limosa) [A156]	G01.01, F03.01, G01.02, E01, F02.03, A04, D01.05, D01.01, A03, A04.03, A08	Nautical sports, Hunting, Walking, horseriding and non-motorised vehicles, Urbanised areas, human habitation, Leisure fishing, Grazing, Bridge, viaduct, Paths, tracks, cycling tracks, Mowing or cutting of grassland, Abandonment of pastoral systems lack of grazing, Fertilisation
004097	River Suck Callows SPA	Lapwing (Vanellus vanellus) [A142], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Wetland and Waterbirds [A999], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Golden Plover (Pluvialis apricaria) [A140]	E01.03, F03.01, A08, A03, F02.03, G01.01, A04, B	Dispersed habitation, Hunting, Fertilisation, Mowing or cutting of grassland, Leisure fishing, Nautical sports, Grazing, Sylviculture, forestry

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004103	All Saints Bog SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	C01.01, D01.02, A01, F03.01, C01.03.02, A03, E01.03, A04, B01, A08, C01.03, J01	Sand and gravel extraction , Roads, motorways, Cultivation, Hunting, Mechanical removal of peat, Mowing or cutting of grassland, Dispersed habitation, Grazing, Forest planting on open ground, Fertilisation, Peat extraction, Fire and fire suppression
004137	Dovegrove Callows SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	A08	Fertilisation
004160	Slieve Bloom Mountains SPA	Hen harrier (Circus cyaneus) [A082]	E01.03, A04, D01.01, B, C01.03, D01.02	Dispersed habitation, Grazing, Paths, tracks, cycling tracks, Sylviculture, forestry, Peat extraction, Roads, motorways
004165	Slievefelim to Silvermines Mountains SPA	Hen harrier (Circus cyaneus) [A082]	B, A04, E01.03, D01.01, D01.02, C01.03	Sylviculture, forestry, Grazing, Dispersed habitation, Paths, tracks, cycling tracks, Roads, motorways, Peat extraction
004168	Slieve Aughty Mountains SPA	Merlin (Falco columbarius) [A098], Hen harrier (Circus cyaneus) [A082]	D01.01, B, E01.03, A04, D01.02, C01.03	Paths, tracks, cycling tracks, Sylviculture, forestry, Dispersed habitation, Grazing, Roads, motorways, Peat extraction
004233	River Nore SPA	Kingfisher (Alcedo atthis) [A229]	D03.01, J02.01, X	Port areas, Landfill, land reclamation and drying out, general, No threats or pressures

Appendix 1 - Table 3 Known threats and pressures related to the qualifying interests from each Special Area of Conservation as per article 17 reporting from the National Parks and Wildlife Services

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Geyer's Whorl Snail (Vertigo geyeri)	[1013]	Loss of riverside and canalside habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Desmoulin's Whorl Snail (Vertigo moulinsiana)	[1016]	Loss of riverside and canalside habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Freshwater Pearl Mussel (Margaritifera margaritifera)	[1029]	In stream works, hydrological and morphological alterations, sediment and enrichment, pollution due urbanisation etc. Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
White-clawed Crayfish (Austropotamobius pallipes)	[1092]	Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Invasive species, disease, surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
Sea Lamprey(Petromyzon marinus)	[1095]	Barriers to upstream migration (e.g., weirs), which limit access to spawning beds and juvenile habitat are main threats to this species.	Marine water dependent. Low sensitivity to hydrological changes. Coastal development, trampling from recreational activity.
Brook Lamprey (Lampetra planeri)	[1096]	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	Surface water dependent. Highly sensitive to hydrological change. Availability of suitable spawning ground is a considerable issue for the species.
River Lamprey (Lampetra fluviatilis)	[1099]	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	Surface water dependent. Highly sensitive to hydrological change. Availability of suitable spawning ground is a considerable issue for the species.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Twaite Shad (Alosa fallax fallax)	[1103]	Habitat quality, particularly at spawning sites is the most notable threat to this species.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Salmon (Salmo salar)	[1106]	Marine survival rates are of concern for the populations.	Disease, parasites and barriers to movement.
Sandbanks which are slightly covered by sea water all the time	[1110]	None identified by the NPWS in the 2019 publication of the Status of EU protected habitats and species in Ireland.	None identified.
Estuaries	[1130]	Pollution, fishing /aquaculture and habitat quality.	Inappropriate development, changes in turbidity
Mudflats and sandflats not covered by seawater at low tide	[1140]	Aquaculture, fishing, bait digging, removal of fauna, reclamation of land, coastal protection works and invasive species, particularly cord-grass; hard coastal defence structures; sea-level rise.	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Changes to salinity and tidal regime. Coastal development.
Coastal lagoons	[1150]	Eutrophication. Modification of hydrological glow and drainage.	Erosion and silting up. Accumulation of seaweed. Land use management resulting in hydrological interactions.
Large shallow inlets and bays	[1160]	Pressures on the habitat include nutrient enrichment, dredging and invasive alien species. Overall Status is assessed as Bad and deteriorating, a genuine decline since the 2013 assessment of Inadequate and improving and is based on more detailed information.	Inappropriate development, changes in turbidity, surface water runoff, discharge etc. On site management activities.
Reefs	[1170]	Professional fishing; taking for fauna; taking for flora; water pollution; climate change; and change in species composition.	Sensitive to disturbance and pollution.
Perennial vegetation of stony banks	[1220]	Disruption of the sediment supply, owing to the interruption of the coastal processes, caused by developments such as car parks and coastal defence structures including rock armour and sea walls. The removal of gravel.	Marine water dependent. Low sensitivity to hydrological changes. Coastal development, trampling from recreational activity and gravel removal.
Vegetated sea cliffs of the Atlantic and Baltic coasts	[1230]	A number of significant pressures were identified, including trampling by walkers, invasive non-native species, gravel extraction, and sea-level and wave exposure changes due to	Land use activities such as tourism and/or agricultural practices. Direct alteration to the habitat or effects such as burning or drainage.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
		climate change. There have been no significant losses in sea cliff habitat since the Directive came into force.	
Lesser horseshoe bat(Rhinolophus hipposideros)	[1303]	Habitat availability, range and roost availability.	Tempeture fluctuations in their roosts. Resource availability. Habitat connectivity. Lighting and noise effects. Urbanisation.
Salicornia and other annuals colonising mud and sand	[1310]	Invasive Species; erosion and accretion.	Marine water dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	[1330]	Overgrazing; erosion; invasive species, particularly common cordgrass (Spartina anglica); infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.
Bottlenose Dolphin (Tursiops truncatus)	[1349]	Pressures acting on the species in Irish waters mainly involve commercial vessel-based activities such as impacts arising from geophysical seismic exploration or from local/regional prey removal from fisheries.	Large vessel movement effecting distributions. Prey availability, reduction in available habitat and water quality.
Otter (Lutra lutra)	[1355]	Decrease in water quality: Use of pesticides; fertilization; vegetation removal; professional fishing (including lobster pots and fyke nets); unting; poisoning; sand and gravel extraction; mechanical removal of peat; urbanised areas; human habitation; continuous urbanization; drainage; management of aquatic and bank vegetation for drainage purposes; and canalization or modifying structures of inland water course.	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.
Mediterranean salt meadows (Juncetalia maritimi)	[1410]	Over-grazing by cattle or sheep; infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Coastal development and reclamation.
Killarney Fern (Trichomanes speciosum)	[1421]	Threatened by habitat loss, deliberate collection, encroachment of invasive or vigorous species, or indirectly by water pollution, removal of woodland or alteration of watercourses.	Land use management and direct impacts.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
River Nore Freshwater Pearl Mussel (Margaritifera durrovensis)	[1990]	In stream works, hydrological and morphological alterations, sediment and enrichment, pollution due urbanisation etc. Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	[3110]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Turloughs	[3180]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Water courses of plain to montane levels with vegetation(Ranunculion fluitantis and Callitricho-Batrachion)	[3260]	Hydrological and morphological changes, water quality, enrichment, and surface water discharges from industrial site and/or agriculture.	Surface water dependent Highly sensitive to hydrological change and direct physical interactions.
Northern Atlantic wet heaths with Erica tetralix	[4010]	Reclamation, afforestation and burning; overstocking; invasion by non-heath species; exposure of peat to severe erosion.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
European dry heaths	[4030]	Afforestation, overburning, over-grazing, under-grazing and bracken invasion.	Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
Alpine and Boreal heaths	[4060]	Abandonment; overgrazing; burning; outdoor recreation; quarries; communication networks; and wind farm developments.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Juniperus communis formations on heaths or calcareous grasslands	[5130]	Overgrazing, erosion, scrub clearance, inappropriate land use management, and succession processes.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Calaminarian grasslands of the Murawy galmanowa(Violetalia calaminariae)	[6130]	Land reclamation, afforestation; drainage; and infrastructural development.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia)* important orchid sites	[6210]	Land reclamation, afforestation; drainage; and infrastructural development.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)	[6230]	Bracken encroachment, succession, inappropriate grazing, afforestation; drainage; and infrastructural development.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	[6410]	Agricultural intensification; drainage; abandonment of pastoral systems.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	[6430]	Agricultural intensification; drainage; abandonment of pastoral systems.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	[6510]	Agricultural intensification; drainage; abandonment of pastoral systems.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Active raised bogs	[7110]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
Degraded raised bogs still capable of natural regeneration	[7120]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
Blanket bogs (* if active bog)	[7130]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface water interactions. Drainage and land use management are the key things.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Transition mires and quaking bogs	[7140]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
Depressions on peat substrates of the Rhynchosporion	[7150]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and ground water interactions. Drainage and land use management are the key things.
Calcareous fens with species of mariscus sedge and bog cotton (Cladium mariscus and Caricion davallianae)	[7210]	Hydrological changes, pollution to surface waters, urbanisation, roads development, groundwater interactions, grazing and cultivation practices and the inappropriate use of pesticides.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Petrifying springs with tufa formation (Cratoneurion)	[7220]	Ground water interactions, on site management activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Alkaline fens	[7230]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	[8110]	Overgrazing, undergrazing and succession were recorded as medium-importance pressures in this reporting period, and Structure and functions were again assessed as Inadequate, the trend is considered to be stable rather than improving. This change is due to improved knowledge and the habitat is considered to have been stable since before the last assessment.	Erosion, overgrazing and recreation.
Calcareous rocky slopes with chasmophytic vegetation	[8210]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation.
Siliceous rocky slopes with chasmophytic vegetation	[8220]	Pressures associated with the non-native invasive species New Zealand willowherb (Epilobium brunnescens).	Erosion, overgrazing and recreation.
Limestone pavements	[8240]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Caves not open to the public	[8310]	Cave systems are mainly protected for the Lesser Horseshoe bat which require stable temperatures and limited disturbances. None reported to be significant.	None identified.
Old sessile oak woods with Ilex and Blechnum in the British Isles	[91A0]	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to oak woodlands; and the construction of communication networks through the woodland.	Changes in management. Changes in nutrient or base status. Introduction of alien species.
Bog woodland	[91D0]	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to oak woodlands; and the construction of communication networks through the woodland.	Changes in management. Changes in nutrient or base status. Introduction of alien species.
Taxus baccata woods of the British Isles	[91J0]	Invasive Species; erosion and accretion.	Changes in management. Changes in nutrient or base status. Introduction of alien species.

Appendix 1 - Table 4 Known threats and pressures related to the qualifying interests from each Special Area of Conservation as per article 17 reporting from the National Parks and Wildlife Services

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A005	Great Crested Grebe	Podiceps cristatus cristatus	F01, F02, G01, H01, H03	Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution
A017	Great Cormorant	Phalacrocorax carbo carbo	C03, F02, F03, G01, H03	Renewable abiotic energy use, Fishing and harvesting aquatic ressources, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Marine water pollution
A038	Whooper Swan	Cygnus cygnus	A02, A11, C03, D02, G01, H07	Modification of cultivation practices, Agriculture activities not referred to above, Renewable abiotic energy use, Utility and service lines, Outdoor sports and leisure activities, recreational activities, other forms of pollution
A046	Light-Bellied Brent Goose	Branta bernicla hrota	A02, A11, C03, D02, F01, G01, G05, H03, H07, I01, J03	Modification of cultivation practices, Agriculture activities not referred to above, Renewable abiotic energy use, Utility and service lines, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Other Human intrusions and disturbances , Marine water pollution, other forms of pollution, Invasive non-native species, Other Ecosystem Modifications
A048	Common Shelduck	Tadorna tadorna	F01, F02, G01, H03, M01	Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Changes in abiotic conditions
A050	Eurasian Wigeon	Anas penelope	C03, F01, F03, G01, H01, H03, H07, I01, J02, J03	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution, other forms of pollution, Invasive non-native species, Human induced changes in hydraulic conditions, Other Ecosystem Modifications.

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A052	Eurasian Teal	Anas crecca crecca	C03, F03, G01, H01, H03, H07, J02	Renewable abiotic energy use, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution, other forms of pollution, Human induced changes in hydraulic conditions
A054	Northern Pintail	Anas acuta	C03, F01, F03, G01, H01, H03, H07, J02	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution, other forms of pollution, Human induced changes in hydraulic conditions
A056	Northern Shoveler	Anas clypeata	C03, F03, G01, H01, H03, H07	Renewable abiotic energy use, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution, other forms of pollution
A061	Tufted Duck	Aythya fuligula	C03, F03, G01, H01, H07, M02	Renewable abiotic energy use, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Other forms of pollution, Changes in biotic conditions
A062	Greater Scaup	Aythya marila	C03, F01, F02, F03, G01, H01, H03	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution
A067	Common Goldeneye	Bucephala clangula	C03, F01, F03, G01, H01, H03, H07, M02	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution, other forms of pollution, Changes in biotic conditions
A069	Red-Breasted Merganser	Mergus serrator	C03, F01, F02, G01, H03	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A082	Hen Harrier	Circus cyaneus	A02, B01, B02, C01, C03, F03, G01, I01, J01, J03	Modification of cultivation practices, Forest planting on open ground, Forest and Plantation management & use, Mining and quarrying, Renewable abiotic energy use, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Invasive non-native species, Fire and Fire suppression, Other Ecosystem Modifications
A098	Merlin	Falco columbarius	A02, B01, B02, C03, M02	Modification of cultivation practices, Forest planting on open ground, Forest and Plantation management & use, Renewable abiotic energy use, Changes in biotic conditions
A122	Corncrake	Crex crex	A03.01, A04.01, K03.04, M01.03	Intensive Mowing or intensification, Intensive grazing, Predation, Flooding and rising precipitations
A130	Eurasian Oystercatcher	Haematopus ostralegus	C03, F01, F02, G01, H03, J02	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions
A137	Common Ringed Plover	Charadrius hiaticula	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
A140	European Golden Plover	Pluvialis apricaria	A02, A04, B01, C01, C03, F01, G01, H03, J01, K03, M02	Modification of cultivation practices, Grazing, Forest planting on open ground, Mining and quarrying, Renewable abiotic energy use, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Fire and Fire suppression, Interspecific faunal relations, Changes in biotic conditions
A141	Grey Plover	Pluvialis squatarola	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A142	Lapwing	Vanellus vanellus	A02, C03, F01, G01, H03	Modification of cultivation practices, Renewable abiotic energy use, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Marine water pollution
A143	Knot	Calidris canutus	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
A149	Dunlin	Calidris alpina	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
A156	Black-Tailed Godwit	Limosa limosa islandica	A02, C03, F01, F02, G01, H03, J02, J03	Modification of cultivation practices, Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications
A157	Bar-Tailed Godwit	Limosa lapponica	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
A160	Curlew	Numenius arquata arquata	C03, F01, F02, G01, H03, J02, J03	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications
A162	Common Redshank	Tringa totanus	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic ressources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A164	Common Greenshank	Tringa nebularia	C03, F01, G01, H03, J02, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Changes in abiotic conditions
A169	Ruddy Turnstone	Arenaria interpres	C03, F01, G01, H03, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Other Ecosystem Modifications, Changes in abiotic conditions
A179	Black-Headed Gull	Larus ridibundus	A04, C03, F02, H03, J03, M01	Grazing, Renewable abiotic energy use, Fishing and harvesting aquatic ressources, Marine water pollution, Other Ecosystem Modifications, Changes in abiotic conditions
A193	Common Tern	Sterna hirundo	C03, D01, D03, G01, I01	Renewable abiotic energy use, Roads, paths and railroads, Shipping lanes, ports, marine constructions, Outdoor sports and leisure activities, recreational activities, Invasive non-native species
A229	Common Kingfisher	Alcedo atthis	A11, D01, G01, H01, I01, J02	Agriculture activities not referred to above, Roads, paths and railroads, Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Invasive non-native species, Human induced changes in hydraulic conditions
A395	Greenland White-Fronted Goose	Anser albifrons flavirostris	A02, A04, A06, A11, B01, C03, D02, D05, F01, F03, G01, H03, H07, K03, M01, M02	Modification of cultivation practices, Grazing, Annual and perennial non-timber crops, Agriculture activities not referred to above, Forest planting on open ground, Renewable abiotic energy use, Utility and service lines, Improved access to site, Marine and Freshwater Aquaculture, Hunting and collection of wild animals (terrestrial), Outdoor sports and leisure activities, recreational activities, Marine water pollution, Other forms of pollution, Interspecific faunal relations, Changes in abiotic conditions, Changes in biotic conditions

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APPENDIX 2

Relationship with other Plans and Programmes

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

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Level			
SEA Directive (2001/42/EC)	• Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. • Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment.	• Carry out and environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. • Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme. • Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission. • Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects. • Inform relevant authorities and stakeholders on the decision to implement the plan or programme. • Issue a statement to include requirements detailed in Article 9 of the Directive. • Monitor and mitigate significant environmental effects identified by the assessment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EIA Directive (2011/92/EU as amended by 2014/52/EU)	• Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment.	• All projects listed in Annex I are considered as having significant effects on the environment and require an EIA.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.	• For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III. • The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor. • Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made.	achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)	• Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora. • Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora. • Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of community interest. • Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements.	• Propose and protect sites of importance to habitats, plant and animal species. • Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. • Carry out comprehensive assessment of habitat types and species present. • Establish a system of strict protection for the animal species and plant species listed in Annex IV.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Birds Directive (2009/147/EC)	• Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats. • Protect, manage and control these species and comply with regulations relating to their exploitation. • The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.	• Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. • Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas). • Ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes. • Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Bathing Water Directive (revised) 2006 [2006/7/EC]	• The purpose of this Directive is to preserve, protect and improve the quality of the environment and to protect human health by complementing Directive 2000/60/EC	This Directive lays down provisions for: • the monitoring and classification of bathing water quality; • the management of bathing water quality; and • the provision of information to the public on bathing water quality	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	• Reducing water pollution caused or induced by nitrates from agricultural sources and - preventing further such pollution.	Ireland's Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland's third NAP came into operation in 2014. Each Member State's NAP must include: • a limit on the amount of livestock manure applied to the land each year	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• set periods when land spreading is prohibited due to risk • set capacity levels for the storage of livestock manure	regulatory framework for environmental protection and management.
Directive 2010/75/EU on industrial emissions	The purpose of this Directive is lay down rules to prevent or, where that is not practicable, to reduce industrial emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of environmental protection.	The legislation covers industrial activities in the following sectors: • energy; • metal production and processing; • minerals; • chemicals; • waste management; • and other sectors such as pulp and paper production, slaughterhouses and the intensive rearing of poultry and pigs. All installations covered by the directive must prevent and reduce pollution by applying the best available techniques (BATs)* and address efficient energy use, waste prevention and management and measures to prevent accidents and limit their consequences.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Plant Protection (products) Directive 2009/127/EC	• The Directive aims at reducing the risks and impacts of pesticide use on human health and • the environment by introducing different targets, tools and measures such as Integrated Pest • Management (IPM) or National Action Plans (NAPs).	• The Framework Directive applies to pesticides which are plant protection products. • Regarding pesticide application equipment already in professional use, the Framework Directive introduces requirements for the inspection and maintenance to be carried out on such equipment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
EU Renewable Energy Directive (EU/2018/2001)	• This Directive sets an overall European renewable energy target of 32% by 2030 and includes rules to ensure the uptake of renewables in the transport sector and in heating and cooling. • The directive sets common principles and rules for renewable energy support schemes, sustainability criteria for biomass and the right to produce and consume renewable energy and to establish renewable energy communities. • It also establishes rules to remove barriers, stimulate investments and drive cost reductions in renewable energy technologies and empowers citizens and businesses to participate in the clean energy transformation.	• The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets. • The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables. • EU countries set out how they plan to meet these targets and the general course of their renewable energy policy in national renewable energy action plans. • Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Directive 2018/2001 on the promotion of the use of energy from renewable sources (recast)	This Directive establishes a common framework for the promotion of energy from renewable sources. It sets a binding European Union target for the overall share of energy from renewable sources in the Union's gross final consumption of energy in 2030: Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least 32%. Support schemes for energy from renewable sources shall be adopted by Member States. Provisions on joint projects between Member States and between Member States and third countries are laid down too.	The Directive lays down rules on financial support for electricity from renewable sources, on self-consumption of such electricity, on the use of energy from renewable sources in the heating and cooling sector and in the transport sector, on regional cooperation between Member States, and between Member States and third countries, on guarantees of origin, on administrative procedures and on information and training. It also establishes sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels. The latter include fuels produced from waste, from agricultural biomass and from forest biomass.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		The Commission shall monitor the origin of biofuels, bioliquids and biomass fuels consumed in the European Union and the impact of their production, including the impact as a result of displacement, on land use in the Union and in the main third countries of supply.	
Alternative Fuels Infrastructure Directive (2014/94/EU)	This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport.	This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Energy Efficiency Directive (EU) 2023/1791	The new directive introduces a series of measures to help accelerate energy efficiency, including embracing the "energy efficiency first" principle in the energy and non-energy policies.	• Establishing an EU legally-binding target to reduce the EU's final energy consumption by 11.7% by 2030 (relative to the 2020 reference scenario). This includes for each Member State the requirement to set its indicative national contribution based on objective criteria reflecting national circumstances. If the national contributions do not add up to the EU target, an ambition gap mechanism is applied by the Commission. • Increasing annual energy savings from 0.8% (at present) to 1.3% (2024-2025), then 1.5% (2026-2027) and 1.9% from 2028 onwards. That's an average of 1.49% of new annual savings for the period from 2024-2030. • Obliging Member States to prioritise vulnerable customers and social housing within the scope of their energy savings measures.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Introducing an annual energy consumption reduction target of 1.9% for the public sector as a whole. • Extending the annual 3% buildings renovation obligation to all the levels of public administration. • Introducing a different approach, based on energy consumption, for business to have an energy management system or to carry out an energy audits. • Bringing in a new obligation to monitor the energy performance of data centres, with an EU-level database collecting and publishing data. • Promoting local heating & cooling plans in larger municipalities. • Progressively increasing the efficient energy consumption in heat or cold supply, also in district heating.	
EU Seveso Directive (2012/18/EU)	This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.	• The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas: • Classification, labelling and packaging of chemicals; • The Union's Civil Protection Mechanism; • The Security Union Agenda including CBRN-E and Protection of critical infrastructure; • Policy on environmental liability and on the protection of the environment through criminal law; • Safety of offshore oil and gas operations.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	The EU's biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030, and contains specific actions and commitments.	The Strategy contains specific commitments and actions to be delivered by 2030, including: • Establishing a larger EU-wide network of protected areas on land and at • sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value. • An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss. • A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision making. • Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	• Promoting GI in the main EU policy areas. • Supporting EU-level GI projects. • Improving access to finance for GI projects. • Improving information and promoting innovation.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			environmental protection and management.
UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage	• links concepts of nature conservation and the preservation of cultural properties; and • recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.	• sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them; • each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage; • encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management
UN (1992) The Convention on Biological Diversity	An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.	The Convention has three main goals: • the conservation of biological diversity (or biodiversity); • the sustainable use of its components; and • the fair and equitable sharing of benefits arising from genetic resources.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
UN (1992) Framework Convention on Climate Change	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions. The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol. At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.	• The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II). • EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP. • Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
EU 2020 Climate and Energy Package	• Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020. • Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels. • Aims to raise the share of EU energy consumption produced from renewable resources to 20%. • Achieve a 20% improvement in the EU's energy efficiency.	Four pieces of complimentary legislation: • Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps. • Member States have agreed national targets for non-EU ETS emissions from countries outside the EU. • Meet the national renewable energy targets of 16% for Ireland by 2020. • Preparing a legal framework for technologies in carbon capture and storage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2030 Framework for Climate and Energy	• A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries. • Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario.	• To meet the targets, the European Commission has proposed the following policies for 2030: • A reformed EU emissions trading scheme (ETS). • New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries. • First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive)	• The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive). • Sets new air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives.	• Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole. • Aims to assess the ambient air quality in Member States on the basis of common methods and criteria.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Fourth Daughter Directive (2004/107/EC)	• Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values. • Allows the possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. • The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.	• Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and community measures. • Ensures that such information on ambient air quality is made available to the public. • Aims to maintain air quality where it is good and improving it in other cases. • Aims to promote increased cooperation between the Member States in reducing air pollution.	regulatory framework for environmental protection and management.
Noise Directive (2002/49/EC)	The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.	The Directive requires competent authorities in Member States to: • Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels; • Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and • Inform and consult the public about noise exposure, its effects, and the measures considered to address noise. The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Floods Directive (2007/60/EC)	• Establishes a framework for the assessment and management of flood risks • Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community	• Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment • Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3. • Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above. • Inform the public and allow the public to participate in planning process.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Framework Directive (2000/60/EC)	• Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats. • Preserve and prevent the deterioration of water status and where necessary improve and maintain “good status” of water bodies. • Promote sustainable water usage. • The Water Framework Directive repealed the following Directives: • The Drinking Water Abstraction Directive • Sampling Drinking Water Directive • Exchange of Information on Quality of Surface Freshwater Directive • Shellfish Directive • Freshwater Fish Directive	• Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive. • Achieve "good status" for all waters. • Manage water bodies based on identifying and establishing river basins districts. • Involve the public and streamline legislation. • Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas. • Establish a programme of monitoring for surface water status, groundwater status and protected areas. • Recover costs for water services.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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	• Groundwater Directive • Dangerous Substances Directive		
Groundwater Directive (2006/118/EC)	• Protect, control and conserve groundwater. • Prevent the deterioration of the status of all bodies of groundwater. • Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals.	• Meet minimum groundwater standards listed in Annex 1 of Directive. • Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Drinking Water Directive (2020/2184)	• The recast Drinking Water Directive is the EU's main law on drinking water. It concerns the access to and the quality of water intended for human consumption to protect human health. • The EU adopted the recast Drinking Water Directive in December 2020 and the Directive entered into force in January 2021. Member States have to transpose the Directive into national law and comply with its provisions by 12 January 2023. The recast Drinking Water Directive will further protect human health thanks to updated water quality standards, tackling pollutants of concern, such as endocrine disruptors and microplastics, and leading to even cleaner water from the tap for all.	Key features of the revised Directive are: • reinforced water quality standards, in line or, in some cases, even more stringent than the World Health Organisation (WHO) recommendations • tackling emerging pollutants, such as endocrine disruptors and PFAs, as well as microplastics • a preventive approach favouring actions to reduce pollution at source by introducing the risk-based approach • measures to ensure better access to water, particularly for vulnerable and marginalised groups • measures to promote tap water, including in public spaces and restaurants, to reduce (plastic) bottle consumption • harmonisation of the quality standards for materials and products in contact with water • measures to reduce water leakages and to increase transparency of the sector	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Urban Waste Water Treatment Directive (91/271/EEC)	• This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. • The objective of the Directive is to protect the environment from the adverse effects of waste water discharges.	• Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment. • Annex II requires the designation of areas sensitive to eutrophication which receive water discharges. • Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.	• Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent. • Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures. • Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive. • The competent authority shall be entitled to initiate cost recovery proceedings against the operator. • The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met. • The Environmental Liability Directive has been amended through a number of Directives that are not of significant relevance to the SEA for the Guidelines. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing • knowledge and new needs.	
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.	The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co- operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.	• The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties. • The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co- operation between states and regions.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.	• (I) Document and understand industrial heritage structures, sites, areas and landscapes and their values; • (II) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes; • (III) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and • (IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	• Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time.	• Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights. • Recognise individual and collective responsibility towards cultural heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

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	• A heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations.	• Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal. • Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society. • Greater synergy of competencies among all the public, institutional and private actors concerned.	environmental protection and management.
European Landscape Convention 2000	The developments in agriculture, forestry, industrial and mineral production techniques, together with the practices followed in town and country planning, transport, networks, tourism and recreation, and at a more general level, changes in the world economy, have in many cases accelerated the transformation of landscapes. The Convention expresses a concern to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.	• Promote protection, management and planning of landscapes. • Organise European co-operation on landscape issues.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	It identifies three key objectives: • to protect, conserve and enhance the Union's natural capital • to turn the Union into a resource-efficient, green, and competitive low-carbon economy • to safeguard the Union's citizens from environment- related pressures and risks to health and wellbeing	Four so called "enablers" will help Europe deliver on these objectives (goals): • Better implementation of legislation. • Better information by improving the knowledge base. • More and wiser investment for environment and climate policy. • Full integration of environmental requirements and considerations into other policies.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• Two additional horizontal priority objectives complete the programme: • To make the Union's cities more sustainable. • To help the Union address international environmental and climate challenges more effectively.	
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	The convention has three main aims: • to conserve wild flora and fauna and their natural habitats • to promote cooperation between states • to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species	The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also: • Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control. • Look at implementing the Bern Convention in central Eastern Europe and the Caucus. • Take account of the potential impact on natural heritage by other policies. • Promote education and information of the public, ensuring the need to conserve species is understood and acted upon. • Develop an extensive number of species action plans, codes of conducts, and guidelines, at their own initiative or in co- operation with other organisations. • Created the Emerald Network, an ecological network made up of Areas of Special Conservation Interest.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bali Road Map (2007)	The overall goals of the project are twofold: • To increase national capacity to co-ordinate ministerial views, participate in the UNFCCC process, and negotiate positions within the timeframe of the Bali Action Plan; and	The Bali Action Plan is centred on four main building Blocks: • mitigation • adaptation • technology	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities.	• financing	achievement of the objectives of the regulatory framework for environmental protection and management.
Cancun Agreements (2010)	Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover: • Mitigation • Transparency of actions • Technology • Finance • Adaptation • Forests • Capacity building	Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Doha Climate Gateway (2012)	Set of decisions taken at the COP 18 meeting in Doha in 2012 which pave the way for a new agreement in Paris in 2015.	• The following actions were committed to by governments at this conference: • Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020); • Complete the work under Bali Action Plan and to focus on new completing new targets; • Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt; • Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and • Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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EU Common Agricultural Policy	• To improve agricultural productivity, so that consumers have a stable supply of affordable food; and • To ensure that EU farmers can make a reasonable living.	• ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future; • Climate change and sustainable management of natural resources; • Looking after the countryside across the EU and keeping the rural economy alive.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU REACH Regulation (EC 1907/2006)(as amended)	Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.	The aims are achieved by applying REACH, namely: • Registration, • Evaluation, • Authorisation; and • Restriction of chemicals. REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Stockholm Convention	The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants.	• Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex A to the Convention • Restrict the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex B to the Convention • Reduce or eliminate releases from unintentionally produced POPs that are listed in Annex C to the Convention • Ensure that stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• To target additional POPs • Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance	
Ramsar Convention	The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".	Under the "three pillars" of the Convention, the Contracting Parties commit to: • Work towards the wise use of all their wetlands; • Designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management; • Cooperate internationally on transboundary wetlands, shared wetland systems and shared species.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European 2020 Strategy for Growth	Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities: • Smart growth: developing an economy based on knowledge and innovation; • Sustainable growth: promoting a more resource efficient, greener and more competitive economy; • Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.	In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020: 1. 75 % of the population aged 20-64 should be employed; 2. 3% of the EU's GDP should be invested in R&D; 3. the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); 4. the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 5. 20 million less people should be at risk of poverty.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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The European Green Deal (EGD) 2019	The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind.	• It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution. • It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition. • In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030, and contains legislative proposals to implement stricter standards for emissions and air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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National Level			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan (2021 - 2030)	• The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. • The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.	The National Planning Framework published alongside the National Development Plan yields ten National Strategic Outcomes as follows: 1. Compact Growth 2. Enhanced Regional Accessibility 3. Strengthened Rural Economies and Communities 4. Sustainable Mobility 5. A Strong Economy, supported by Enterprise, Innovation and Skills 6. High-Quality International Connectivity 7. Enhanced Amenity and Heritage 8. Transition to a Low-Carbon and Climate-Resilient Society 9. Sustainable Management of Water and other Environmental Resources 10. Access to Quality Childcare, Education and Health Services	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning, Land Use and Transport Outlook 2040 [In Preparation]	The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will: • Quantify in broad terms the appropriate scale of financial investment in land transport over the long term; • Consider how fiscal, environmental and technological developments might impact on this investment; and,	In preparation.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates • the objectives of Project Ireland 2040.		
Planning and Development Act 2000 (as amended)	The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2022 with specific regard given to supporting economic renewal and sustainable development.	• Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas. • There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission. • Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large scale projects. • Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive.	• The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning. • These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning. • Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.	• They provide, among other things, for: the appointment and functions of authorized officers; identification, classification and other procedures relative to the designation of Community sites. • The Regulations have been prepared to address several judgments of the CJEU against Ireland, notably cases C- 418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Waste Management Act 1996, as amended	To make provision in relation to the prevention, management and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	• The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009 (S.I 296 of 2009)	The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	Actions: • Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997). • Require the production of sub-basin management plans with programmes of measures to achieve these objectives. • Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations 2016 (S.I. No. 366 of 2016)	To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values. • Part A of Schedule 6 has been amended to include changes to the rules governing the determination of background levels for the purposes of establishing threshold values for groundwater pollutants and indicators of pollution. • Part B of Schedule 6 has been amended to include nitrites and phosphorus (total) / phosphates among the minimum list of pollutants and their indicators which the Environmental Protection Agency (EPA) must consider when establishing threshold values	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established	
S.I. No. 113/2022 - European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022	• The purpose of the Regulations is to provide a basic set of measures to ensure the protection of • waters, including drinking water sources, against pollution caused by nitrogen and phosphorus from • agricultural sources, with the primary emphasis on the management of livestock manures and other • fertilisers. The set of measures also provide some basic safeguards against possible harmful impacts • on water quality arising from agricultural expansion. This basic set of measures has been strengthened • over the last two reviews and this new programme provides a further strengthened set of measures • to help reduce nitrogen and phosphorus losses from agriculture and contribute to improvements in • water quality.	The Regulations include measures such as: • Periods when land application of fertilisers is prohibited • Limits on the land application of fertilisers • Storage requirements for livestock manure; and • Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National legislation transport the Industrial Emissions Directive: • Environmental Protection Agency Act 1992, amended by the Protection of the Environment Act 2003; and • Environmental Protection Agency (Integrated Pollution Control) (Licensing) Regulations 2013. • European Union (Environmental Impact Assessment)(Environmental Protection Agency Act 1992)(Amendment) Regulations 2020 • Environmental Protection Agency (Industrial Emissions)(Licensing) (Amendment) Regulations 2020. • European Union (Industrial Emissions) Regulations 2013	• The purpose of this Directive is lay down rules to prevent or, where that is not practicable, to reduce industrial emissions into air, water and land and to prevent the generation of waste, in order to achieve a high level of environmental protection. This legislation transposes the provision of the Directive	The legislation covers industrial activities in the following sectors: • energy; • metal production and processing; • minerals; • chemicals; • waste management; • and other sectors such as pulp and paper production, slaughterhouses and the intensive rearing of poultry and pigs. All installations covered by the directive must prevent and reduce pollution by applying the best available techniques (BATs)* and address efficient energy use, waste prevention and management and measures to prevent accidents and limit their consequences.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
• Environmental Protection Agency (Industrial Emissions)(Licensing) Regulations 2013. Environmental Protection Agency (Licensing Fees) Regulations 2013			
Bathing Water Quality Regulations 2008 (S.I. 79 of 2008)	• These Regulations provide for transposition of the EU Bathing Water Directive 2006 (Directive 2006/7/EC of 15 February 2006) which aims: • To improve health protection for bathers • To establish a more pro-active approach to management of bathing waters, and • To promote increased public involvement and dissemination of information to the public.	• The Regulations establish a new classification system for bathing water quality based on four classifications "poor", "sufficient", "good" and "excellent" and generally require that a classification of at least "sufficient" be achieved by 2015 for all bathing waters. • Local authorities must take appropriate measures with a view to improving waters which are classified as "poor" and increasing the number of bathing waters classified as "good" or "excellent". • A permanent advice against bathing must be issued in a case where a bathing water is classified as "poor" for five consecutive years. • Local authorities are required annually to identify bathing waters, establish a monitoring calendar, carry out the specified monitoring, report the results to the EPA, carry out appropriate management measures where necessary and provide information to the public. • There must be public participation in the identification of waters and the general implementation of the Regulations.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• The EPA is required by the Regulations to classify bathing waters, generally on the basis of the monitoring results for the four preceding bathing seasons, and to publish an annual report in relation to bathing water quality. • Monitoring by local authorities is to commence not later than 2011 with a view to ensuring that a classification is assigned to bathing waters not later than 2015. • Private controllers of access lands may be required to contribute towards the costs incurred by a local authority or the EPA.	
Bathing Water Quality (Amendment) Regulations 2011 (S.I 351 of 2011)	This Regulation defines further the minimum number of bathing water samples required to carry out a bathing water quality assessment.	Further defines the minimum number of bathing water samples required to carry out a bathing water quality assessment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action and Low Carbon Development (Amendment) Act 2021	An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.	When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to:	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment • entered into by the European Union in response or otherwise in relation to that objective, • The policy of the Government on climate change, • Climate justice, • Any existing obligation of the State under the law of the European Union or any • international agreement referred to in section 2; and • The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas • emissions, prepared by the Agency.	environmental protection and management.
Climate Action Plan 2023	The Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.	The Plan lists the actions needed to deliver on our climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated annually, to ensure alignment with Ireland's legally binding economy-wide carbon budgets and sectoral ceilings	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Ireland's Second National Implementation Plan for the Sustainable Development Goals (2022 - 2024)	• National Implementation Plan 2022 - 2024 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). • The first version of the Plan (2018 – 2020) provided a 'SDG Matrix' which identifies the responsible Government Departments for each of the • 169 targets. It also included a 'SDG Policy Map' indicating the relevant national policies for each of the targets.	The Plan identifies five strategic objectives to guide implementation: • To embed the SDG framework into the work of Government Departments to achieve greater Policy Coherence for Sustainable Development; • To integrate the SDGs into Local Authority work to better support the localisation of the SDGs; • Greater partnerships for the Goals; • To further incorporate the principle of Leave No One Behind into Ireland's Agenda 2030 implementation and reporting mechanisms; and • Strong reporting mechanisms	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Clean Air Strategy for Ireland (2023)	The Clean Air Strategy provides the strategic policy framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	• Through this document Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation. • The Strategy should also help tackle climate change. • The Strategy considers a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture. • In any discussion relating to clean air policy, the issue of people's health is paramount, this is a strong theme of the Strategy.	Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EirGrid 's Grid25 Strategy and associated Grid25 Implementation Programme 2017 - 2022	• EirGrid 's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland.	Grid25, EirGrid 's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand, and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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	• "Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way."		
All Island Grid Study 2008	• The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources. • The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for increased shares of electricity sourced from renewable energy in the all island power system.	Key conclusions of the study: • The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study. • All but the high coal-based portfolio lead to significant reductions of CO2 emissions compared to portfolio 1 • All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports. • The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact. • Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered. • Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Strategy for the Future Development of National and Regional Greenways (2018)	• The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. • It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.	• A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure; • Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism • to Ireland and are regularly used by overseas visitors, • domestic visitors and locals thereby contributing to a healthier society through increased physical activity; • Greenways that provide a substantially segregated offroad experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and • Greenways that provide opportunities for the development of local businesses and economies, and • Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Water Resources Plan (2021)	• The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment. • The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment.	The key objectives of the plan are to: • Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions • Assess the current and future water demand from homes, businesses, farms, and industry • Consider the impacts of climate change on Ireland's water resources	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Develop a drought plan advising measures to be taken before and during drought events • Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water • Identify, develop and assess options to help meet potential shortfalls in water supplies • Assess the water resources available at a national level including lakes, rivers and groundwater	
Construction 2020, A Strategy for a Renewed Construction Sector	• Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. • The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated.	This Strategy therefore addresses issues including: • A strategic approach to the provision of housing, based on real and measured needs, with mechanisms in place to detect and act when things are going wrong; • Continuing improvement of the planning process, striking the right balance between current and future requirements; • The availability of financing for viable and worthwhile projects; • Access to mortgage finance on reasonable and sustainable terms; • Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety; • Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and • Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Landscape Strategy for Ireland 2015-2025 and **National Landscape Character**	• The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions. • Landscape Strategy Vision: "Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning."	The objectives of the National Landscape Strategy are to: • Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; • Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; • Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; • Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Hazardous Waste Management Plan (EPA) 2021 - 2027	This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching	The revised Plan makes 20 recommendations under the following topics: • Policy and Regulation • Prevention • Collection and Treatment • Implementation	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period: • To prevent and reduce the generation of hazardous waste by industry and society generally; • To maximise the collection of hazardous waste with a • view to reducing the environmental and health impacts of any unregulated waste; • To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export; • To minimise the environmental, health, social and economic impacts of hazardous waste generation and management.		
National Ports Policy 2013	The core objective of National Ports Policy is to facilitate a competitive and effective market for maritime transport services.	National Ports Policy introduces clear categorisation of the ports sector into Ports of National Significance (Tier 1), Ports of National Significance (Tier 2) and Ports of Regional Significance.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Aviation Policy 2015	Specifically, the principal goals of this National Aviation Policy are:	The National Aviation Policy commits to: • Maintaining safety as the number one priority in Irish aviation and ensuring that safety regulation is robust, effective and efficient;	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• To enhance Ireland's connectivity by ensuring safe, secure and competitive access responsive to the needs of business, tourism and consumers; • To foster the growth of aviation enterprise in Ireland to support job creation and position Ireland as a recognised global leader in aviation; and • To maximise the contribution of the aviation sector to • Ireland's economic growth and development.	• Creating conditions to encourage the development of new routes and services, particularly to new and emerging markets; • Ensuring a high level of competition among airlines operating in the Irish market; • Optimising the operation of the Irish airport network to ensure maximum connectivity to the rest of the world; • Ensuring that the regulatory framework for aviation reflects best international practice and that economic regulation facilitates continued investment in aviation infrastructure at Irish airports to support traffic growth; • Supporting the aircraft leasing and aviation finance sectors to maintain Ireland's leading global position in these spheres; and • Maintaining a safe and innovative general aviation sector to support Ireland's broader aviation industry	achievement of the objectives of the regulatory framework for environmental protection and management.
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density.	The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	The vision is: "*A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where*	These four goals are interlinked, interdependent and mutually supportive: • Goal 1: Increase the proportion of people who are healthy at all stages of life	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	wellbeing is valued and supported at every level of society and is everyone's responsibility."	• Goal 2: Reduce health inequalities • Goal 3: Protect the public from threats to health and wellbeing • Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland	bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	The Tourism Policy Statement sets three headline targets to be achieved by 2025: • Overseas tourism revenue of €5 billion per year • net of inflation excluding carrier receipts; • 250,000 people employed in tourism; and • 10 million overseas visitors to Ireland per year.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Strategy for Northern Ireland: 10 Year Plan	• This Strategy will be published in 2024. • The plan sets out a 10-year plan for the growth of the tourism sector in Northern Ireland., with an aim to increase the value of tourism to the economy by 50-75% compared to 2019.	The strategic goals and core themes of the Strategy are: • Innovative • Inclusive • Sustainable • Attractive • Collaborative The document identifies the key challenges and drivers for growth.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• Vision is to "Establish Northern Ireland as a year-round world class destination which is renowned for its authentic experiences, landscape, heritage and culture and which benefits communities, the economy and the environment, with sustainability at its core." • This Plan may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.		
Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges.	Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Investment Framework for Transport in Ireland (NIFTI) 2021	• NIFTI is the Department of Transport's framework for prioritising future investment in the land transport network to support the delivery of the National Strategic Outcomes. • The NIFTI will guide transport investment in the years ahead to enable the National Planning Framework, support the Climate Action Plan, and promote social, environmental and economic outcomes throughout Ireland.	The four investment priorities stated in NIFTI are: • Mobility of people and goods in urban areas. • Protection and renewal. • Enhanced regional and rural connectivity. • Decarbonisation.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans (including transport)	NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur	• Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. • Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance based actions. • Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. • Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.	2030 will represent a significant milestone, meaning: • Reduced GHG emissions from the energy sector by between 80% and 95% • Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Wildlife Act of 1976 **Wildlife (Amendment) Act, 2000**	The act provides protection and conservation of wild flora and fauna.	• Provides protection for certain species, their habitats and important ecosystems • Give statutory protection to NHAs • Enhances wildlife species and their habitats • Includes more species for protection	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally.	• To mainstream biodiversity in the decision-making process across all sectors. • To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity. • To increase awareness and appreciation of biodiversity and ecosystems services. • To conserve and restore biodiversity and ecosystem services in the wider countryside. • To conserve and restore biodiversity and ecosystem services in the marine environment. • To expand and improve on the management of protected areas and legally protected species. • To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Broadband Plan (2012)	Sets out the strategy to deliver high speed broadband throughout Ireland.	The Plan sets out: • A clear statement of Government policy on the delivery of High Speed Broadband. • Specific targets for the delivery and rollout of high speed broadband and the speeds to be delivered. • The strategy and interventions that will underpin the successful implementation of these targets. • A series of specific complementary measures to promote implementation of Government policy in this area.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)	• Sets out comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. • Ensures flood risk is a key consideration in preparing land use plans and in the assessment of planning applications. • Implementation of the Guidelines is through actions at national, regional, local authority and site-specific levels. • Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.	• Avoid inappropriate development in areas at risk of flooding. • Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off. • Ensure effective management of residual risks for development permitted in floodplains. • Avoid unnecessary restriction of national, regional or local economic and social growth. • Improve the understanding of flood risk among relevant stakeholders. • Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation • are complied with at all stages of flood risk management. The 2009 Flood Risk Management Guidelines were amended by Circular PL 2/2014 (Department of the Environment, Community and Local Government) that provides advice on the use of OPW flood mapping in assessing planning applications and clarifies some advice from the 2009 Guidelines.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003) **European Communities (Water Policy) Regulations**	• Transpose the Water Framework Directive into legislation. • Outlines the general duty of public authorities in relation to water. • Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions.	• Implements River basin districts and characterisation of RBDs and River Basin Management Plans. • Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs. • Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

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of 2003 (SI 350 of 2014) **European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)(as amended)**		• Allows the competent authority to recover the cost of damage/destruction of status of water body. • Outlines environmental objectives and programme of measures and environmental quality standards for priority substances. • Outlines criteria for assessment of groundwater. • Outlines environmental objectives to be achieved for surface water bodies. • Outlines surface water quality standards. • Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality.	environmental protection and management.
Local Government (Water Pollution) Acts 1977 to 1990	The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.	The Water Pollution Acts enable local authorities to: • Prosecute for water pollution offences. • Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters. • Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution. • issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; • Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects. • Prepare water quality management plans for any waters in or adjoining their functional areas.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Water Services Act 2007 **Water Services (Amendment) Act 2012** **Water Services Act (No. 2) 2013** **Water Services Act 2017**	• Provides the water services infrastructure. • Outlines the responsibilities involved in delivering and managing water services. • Identifies the authority in charge of provision of water and wastewater supply. • Irish Water was given the responsibility of the provision of water and wastewater services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland.	Key strategic objectives include: • Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. • Ensuring the provision of adequate water and sewerage services. • Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards • Ensuring the provision of the remaining infrastructure needed to provide secondary wastewater treatment, for compliance with the requirements of the EU Urban Wastewater Treatment Directive. • Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures. • Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. • Ensuring a fair funding model to deliver water services. • Overseeing the establishment of an economic regulation function under the CER.	Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Irish Water's (now known as Uisce Eireann) Water Services Strategic Plan 2015 and associated Proposed	This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and	Six strategic objectives as follows: • Meet Customer Expectations. • Ensure a Safe and Reliable Water Supply. • Provide Effective Management of Wastewater. • Protect and Enhance the Environment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Capital Investment Plan (2020 - 2024)	identifies the priorities to be tackled in the short and medium term.	• Support Social and Economic Growth. • Invest in the Future.	achievement of the objectives of the regulatory framework for environmental protection and management.
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas 2017 - 2022	Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs	• Ensure that the implications of management choices for water levels, quantity and quality are fully explored, understood and factored into policy making and land use planning. • Review the current raised bog NHA network in terms of its contribution to the national conservation objective for raised bog habitats and determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network of NHAs.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Harvest 2020	Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas.	Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			environmental protection and management.
Rural Environmental Protection Scheme (REPS) **Agri-Environmental Options Scheme (AEOS)** **Green, Low-Carbon, Agri- environment Scheme (GLAS)**	• Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection. • GLAS is the new replacement for REPS and AEOS which are both expiring.	• Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation. • Protect biodiversity, endangered species of flora and fauna and wildlife habitats. • Ensure food is produced with the highest regard to the environment. • Implement nutrient management plans and grassland management plans. • Protect and maintain water bodies, wetlands and cultural heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Rural Development Programme	The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	At a more detailed level, the programme also: • Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; • Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and • Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Forestry Programme 2023 – 2027	The new Forestry Programme 2023-2027 came into force in 2023, as soon as State Aid approval by the European Commission has been received. The new Programme sets out increased support for a number of schemes.	The proposed Forestry Programme 2023-2027 contains a series of eight different interventions: • Forest creation; • Agroforestry; • Infrastructure and technology investments;	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Sustainable forest management; • Developing skills and empowering the forest sector for sustainable forest management; • Open forests - social, cultural and heritage forests; • Climate resilient reforestation; • Reconstruction.	achievement of the objectives of the regulatory framework for environmental protection and management.
River Basin Management Plan	River Basin Management Plans set out the measures planned to maintain and improve the status of waters.	• Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive. • Identify and manages water bodies in the RBD. • Establish a programme of measures for monitoring and improving water quality in the RBD. • Involve the public through consultations.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Peatlands Strategy (2015-2025)	This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.	Objectives of the Strategy: • To give direction to Ireland's approach to peatland • management. • To apply to all peatlands, including peat soils. • To ensure that the relevant State authorities and state owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and actions. • To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsible.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• To inform appropriate regulatory systems to facilitate good decision making in support of responsible use. • To inform the provision of appropriate incentives, financial supports and disincentives where required. • To provide a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs. To ensure that specific actions necessary for the achievement of its objectives are clearly identified and delivered by those involved in or responsible for peatlands management or for decisions affecting their management.	
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.	CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows: • Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner.	Three high level goals of equal importance, based on the concept of sustainable development are identified: • To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs. • To increase awareness of the value, opportunities and societal benefits of developing bioenergy.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources.	environmental protection and management.
Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2018/2001: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017-2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: • AFV forecasts • Electricity targets • Natural gas (CNG, LNG) targets • Hydrogen targets • Biofuels targets • LPG targets • Synthetic and paraffinic fuels targets	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including: • 85% increase in exports to €19 billion. • 70% increase in value added to €13 billion. • 60% increase in primary production to €10 billion.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• The creation of 23,000 additional jobs all along the supply chain from producer level to high end value added product development.	environmental protection and management.
Strategic Planning Policy Statement (SPPS) NI	The SPPS consolidates some twenty separate policy publications into one document and sets out strategic subject planning policy for a wide range of planning matters. It also provides the core planning principles to underpin delivery of the two-tier planning system with the aim of furthering sustainable development.	• The overall objective of the planning system is to further sustainable development and improve well-being for the people of the North.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Framework **For Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030**	• This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable. • By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors.	This policy set out to achieve five key goals in transport: • Reduce overall travel demand • Maximise the efficiency of the transport network • Reduce reliance on fossil fuels • Reduce transport emissions • Improve accessibility to transport These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Change Sectoral Adaptation Plan for Built and Archaeological Heritage (2019)	• Heritage in Ireland ranges from private homes, commercial and public buildings, national monuments, underwater and buried archaeology and the physical and cultural settings of all of these.	The five adaptation goals for built and archaeological heritage in Ireland are: 1. To improve understanding of each heritage resource and its vulnerability to climate change	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• This plan considers not only those structures and sites that have been statutorily listed, but all man-made assets that have historical, aesthetic and cultural value, but does not consider natural heritage. Aims to: • Build adaptive capacity within the sector • Reduce the vulnerability of built and archaeological heritage to climate change • Identify and capitalise on the various potential opportunities for the sector.	2. To develop and mainstream sustainable policies and plans for climate-change adaptation of built and archaeological heritage 3. To conserve Ireland's heritage for future generations 4. To communicate and transfer knowledge To exploit the opportunities for built and archaeological heritage to demonstrate value and secure resources	achievement of the objectives of the regulatory framework for environmental protection.
Heritage related legislation: • National Monuments Act 1930 as amended; • Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999; and • The Heritage Act 2018.	Irish Heritage regulations that are relevant to the LACAPs. Broadly, this legislation is designed to conserve and enhance heritage.	Irish Heritage regulations that are relevant to the LACAPs. Broadly, this legislation is designed to conserve and enhance heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
All-Island Strategic Rail Review	The Review aims to inform policy and future strategy for the railways in both jurisdictions on the island of Ireland.	The Review sets out six high-level goals which aim to use rail as effectively as possible to: • contribute to decarbonisation; • improve All Island connectivity between major cities; • enhance regional accessibility; • stimulate economic activity; • encourage sustainable mobility; and achieve economic and financial feasibility.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.
Regional/ County/Local Level			
Regional Economic and Spatial Strategies	The Regional Spatial and Economic Strategies provide a long-term regional level strategic planning and economic framework in support of the implementation of the National Planning Framework.	The Eastern and Midland Regional Economic and Spatial Strategy includes provisions for its 12 constituent local authorities: Fingal County Council; Dublin City Council; South Dublin County Council; Dún Laoghaire-Rathdown County Council; Louth County Council; Kildare County Council; Meath County Council; Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council. The Southern Regional Economic and Spatial Strategy includes provisions for its nine constituent local authorities: Waterford City and County Council, Cork City Council, Cork County Council, Tipperary County Council, Wexford County Council, Kerry County Council, Clare County Council, Limerick City and County Council, Kilkenny County Council and Carlow County Council. The Northern and Western Regional Spatial and Economic Strategy includes provisions for its eight constituent local authorities: Donegal County Council, Leitrim County Council, Sligo County Council, Cavan County Council, Monaghan County Council, Mayo	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		County Council, Roscommon County Council, and Galway County Council.	
Regional Development Strategy 2035 (Northern Ireland)	• Spatial strategy for the future development of Northern Ireland. • Strategic planning framework to facilitate and guide public and private sectors. • This Plan may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.	Aims to provide long-term policy direction with a strategic spatial perspective.	Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Greater Dublin Area (GDA) Transport Strategy (2022-2042)	It sets out how transport will be developed across the region, covering Dublin, Meath, Wicklow and Kildare, over the period of the strategy and has been approved by the Minister for Transport, Tourism and Sport in accordance with the relevant legislation. This Strategy may or may not be directly relevant to the LACAP, however is considered influential in the context of national climate action delivery.	They set out a number of core principles deriving from the strategic vision, which are: • Dublin as the capital city of Ireland and a major European centre shall grow and progress, competing with other cities in the EU, and serving a wide range of international, • national, regional and local needs. • The Dublin and Mid-East Regions will be attractive, vibrant locations for industry, commerce, recreation and tourism and will be a major focus for economic growth within the Country. • The GDA, through its ports and airport connections will continue to be the most important entry/exit point for the country as a whole, and as a Gateway between the European Union and the rest of the World. Access to and through the GDA will continue to be a matter of national importance.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Development in the GDA shall be directly related to investment in integrated high quality public transport services and focused on compact urban form. • Development within the existing urban footprint of the Metropolitan Area will be consolidated to achieve a more compact urban form • Development in the Hinterland Area will be focused on the high quality integrated growth and consolidation of development in key identified towns, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses.	
Transport Strategy for the Cork Metropolitan Area 2040	The Strategy addresses all transport modes and its objective will be to provide a long-term strategic planning framework for the integrated development of transport infrastructure and services in the Cork Metropolitan Area, over the next two decades. This Strategy may or may not be directly relevant to the LACAP, however is considered influential in the context of national climate action delivery.	It will be used to inform transport investment levels and investment prioritisation over both the longer and shorter terms and will be able to inform sustainable integrated land use and transport policy formulation at the strategic (Metropolitan Area) level and at the local level.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Greater Dublin Area Cycle Network Plan	• Sets out a ten year cycling strategy for Counties Dublin, Kildare, Meath and Wicklow • Plan to increase regions cycle network dramatically	Aims to identify and determine: • The Urban Cycle Network at the Primary, Secondary and Feeder level • The Inter-Urban Cycle Network linking the relevant sections of the Urban Network including the elements of the National Cycle Network within the Greater Dublin Area including linkages to key transport locations outside of urban areas such as airports and ports	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• The Plan refers to the EuroVelo International Cycle Route Network of the European Cyclists Federation is a network of 15 long distance cycle routes connecting and uniting the whole European continent. Two of these routes are in Ireland • including EV2 from Galway through Dublin to London, Berlin, Warsaw and Moscow. • This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.	• The Green Route Network being cycle routes for development of tourist, recreational and leisure purposes.	
Dublin to Galway Greenway Plan	• Develop a segregated cycling and walking trail to international standards, extending from Dublin City to Galway which is of a scale that will allow Ireland to harness the potential of an identified growing tourism market for cycling. • This route forms part of an interconnected National Cycle Network of high quality, traffic free, inter urban routes, which will establish Ireland as a quality international tourism destination for a broad range of associated recreational activities and pursuits. • This Strategy may or may not be directly relevant to the LACAP, however, is considered influential in the context of national climate action delivery.	To provide a segregated, substantially off road cycle route from Dublin City to Clifden via Galway City, maximising the use of – where feasible – existing and approved routes and disused railway line corridors and to also use existing plans and/or permitted projects where these have been subject to a consent process that has previously included the carrying out or screening for SEA, EIA and AA.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Local Transport Plans and Strategies	• Local Transport Plans and Strategies relevant to a particular local authority functional area provide a more granular framework for the delivery of sustainable transport systems in accordance with higher-level plans.	• To promote sustainable transport. • To promote integrated and proper transport planning. • To promote safe travel. • To promote the active travel infrastructural development. • To encourage modal shift.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Quality Management Plans	• Ensure that the quality of waters covered by the plan is maintained. • Maintain and improve the quantity and quality of water included in the Plan scope.	• Monitoring of water bodies against quality standards. • Outlines management programmes for water catchments. • Purpose is to maintain and improve the quantity and quality of groundwater.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include: • To identify and evaluate the features of interest for a site • To set clear objectives for the conservation of the features of interest • To describe the site and its management • To identify issues (both positive and negative) that might influence the site • To set out appropriate strategies/management actions to achieve the objectives	• Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected. • These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Groundwater Protection Schemes	A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Economic and Community Plans (LECP)	The overarching vision for each LECP is: "to promote the well-being and quality of life of citizens and communities"	The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Development Plans, Local Area Plans, Planning Schemes	• Outlines planning objectives for land use development (including transport objectives). • Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies. • Sets out the policies and proposals to guide development in the specific Local Authority area.	• Identifies future infrastructure, development and zoning required. • Protects and enhances amenities and environment. • Guides planning authority in assessing proposals. • Aims to guide development in the area and the amount of nature of the planned development. • Aims to promote sustainable development. • Provide for economic development and protect natural environmental, heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Green Infrastructure Plans/Strategies	• Promotes the maintenance and improvement of green infrastructure in an area.	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• Aims to protect and enhance biodiversity and habitats.		and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Biodiversity Action Plans	Aims to protect, conserve, enhance and restore biodiversity and ecosystem services across all spectrums.	• Outlines the status of biodiversity and identifies species of importance. • Outlines objectives and targets to be met to maintain and improve biodiversity. • Aims to increase awareness.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Heritage Plans	Aims to highlight the importance of heritage at a strategic level.	• Manage and promote heritage as well as increase awareness. • Aim to conserve and protect heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
County Landscape Character Assessments	Characterises the geographical dimension of the landscape.	• Identifies the quality, value, sensitivity and capacity of the landscape area. • Guides strategies and guidelines for the future development of the landscape.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Freshwater Pearl Mussel Sub- Basin Management Plans	• Identifies the current status of the species and the reason for loss or decline. • Identifies measure required to improve or restore current status.	• Identifies pressures on Freshwater Pearl Mussels for each of the designated populations in Ireland. • Outlines restoration measures required to ensure favourable conservation status.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Catchment Flood Risk Management Plans	• Produced by Local Authorities. • Outlines areas local flood risk. • Sets out measures to manage and prevent flood risk at a local level.	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Shellfish Pollution Reduction Programmes	Aims to improve water quality and ensure the protection or improvement of designated shellfish waters in order to support shellfish life and growth and contribute to the high quality of shellfish products directly edible by man.	• Identifies key and secondary pressures on water quality in designated shellfish areas. • Outlines specific measures to address identified key and secondary pressures on water quality. • Addresses the specific pressures acting on water quality in each area.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			achievement of the objectives of the regulatory framework for environmental protection and management.
Regional Waste Management Plans	These plans (for the Connacht-Ulster, Southern, and Eastern-Midlands regions) give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Noise Action Plans	The Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to meeting the requirements of the Directive in Ireland.	The main purpose of the Noise Action Plan is to: • Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems • Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects • Reduce noise, where possible, and maintain the environmental acoustic quality where it is good	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.

FEHILY TIMONEY

CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 3

Appropriate Assessment Screening of Plan Revisions

FEHILY TIMONEY

CONSULTANTS IN ENGINEERING, ENVIRONMENTAL SCIENCE & PLANNING

APPROPRIATE ASSESSMENT SCREENING REPORT

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

Prepared for:

Tipperary County Council

Comhairle Contae Thiobraid Árann
Tipperary County Council

Date: **January 2024**

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

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

CORK | DUBLIN | CARLOW

www.fehilytimoney.ie

Appropriate Assessment Screening Report for Modifications to the Local Authority Climate Action Plan 2024 - 2029

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

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Client: Tipperary County Council

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

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

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1. INTRODUCTION

1.1 Background

This is the Appropriate Assessment (AA) Screening Report for modifications to the Tipperary County Council (TCC) 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 Directive[1] and transposing national legislation.

Strategic Environmental Assessment (SEA) was also undertaken on the Draft LACAP in accordance with the requirements of the SEA Directive[2] 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 TCC. These submissions were taken into consideration prior to finalisation of the LACAP. TCC have prepared an Chief Executive Report on the submissions received. This document details the submissions received, TCC 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 Tipperary County Council LACAP 2024 - 2029.
2. The Draft NIR for the Tipperary County Council LACAP 2024 - 2029.
3. The Draft SEA Environmental Report for the Tipperary County Council LACAP 2024 - 2029.
4. Tipperary County Council LACAP Submissions Chief Executive Report.
5. The SEA Screening Report for modifications to Tipperary 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 TCC 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 receptor[3].

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
DZ Opportunity Number 2	The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities and the Renewable Electricity Support Scheme.'
DZ Opportunity Number 4	The opportunity below has been amended: 'Enable sustainable renewable energy development, research and development in the area both at the commercial and community scale and advocate for grid capacity enhancement that can accommodate new investment in renewable energy development whilst ensuring that such development adheres to relevant planning and environmental protection criteria.' The following text has been added to the status: 'To be progressed over the lifetime of the Climate Action Plan noting that investment in the national grid capacity is a key dependency.' The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities and Transport for Ireland (TFI).'
DZ Opportunity Number 7	The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities and Transport for Ireland (TFI).'
DZ Opportunity Number 8	The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities, the Tipperary Education and Training Board.'
DZ Opportunity Number 9	The opportunity below has been amended: 'Consider the development and implementation of a collaborative/innovative approach to nature-based and biodiversity rich land-use solutions in the area, including opportunities to consider on a catchment (or otherwise) basis to support water quality improvement, carbon capture, peatland restoration, land use diversification and flood risk management.'
DZ Action 4.3	The action below has been amended to be as follow: 'The Council and partners to explore the feasibility of the development of a renewable energy development in the area with community partnership whilst ensuring that any associated renewable energy development has appropriate regard to planning and environmental protection criteria.'

Action	Summary of Modification
DZ Action 9.2	The action below has been amended to include carbon capture and peatland restoration: 'Advocate for funding and supports to support land use diversification, carbon capture, peatland restoration nature-based solutions etc as a viable alternative in this area to help support sustainable income and land use management.'
1.3	The action below has been amended: 'Prepare and apply a project design stage checklist to enable and demonstrate 'Climate Proofing' of local (local authority-led) capital projects, for example; projects funded under the 'Outdoor Recreation Scheme', 'Active Travel Scheme', 'Urban Regeneration and Development Fund' etc. The intention will be to help guide the incorporation of climate actions such as biodiversity enhancement, carbon capture, walking and cycling, public transport, nature-based solutions, urban greening, rainwater harvesting, renewable energy technology, infrastructure for zero emission vehicles at project design stage etc. Significant cross-boundary projects that are already subject to Climate Change Appraisal are not subject to this process. Appropriate regard will be had to environmental protection and opportunities for promoting climate action 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.' The tracking measures for this action has been updated: • Develop 'Climate Proofing Checklist • Number of projects/developments subject to climate proofing at project development stage. Apply 'Climate Proofing Checklist' to assessment of local authority projects subject to Part 8 and Section 177AE (application to An Bord Pleanála).
1.7	The action below has been amended: 'Climate Action to be addressed in finance management, including: (a) Consider if there is a need for a separate Revenue Budget (or some other comparable methodology) to capture Climate Action investment/expenditure (b) Review significant income sources to ascertain if it is possible to implement incentive schemes designed to positively incentivise low carbon activity.' A new KPI has been added to this action: 'Review of Finance Management Structure to be complete by Q2 2024.'
1.18	The action below has been amended: 'To fully utilise the existing networks, forums, relationships, influence and outreach of the Council, though its various services and functions to help relate the Climate Action message to stakeholders and communities and deliver on the collaborative outward facing actions as set out in this LACAP. In this respect, the Council take a leading role in an outward facing committee of stakeholders (Sustainabletipp) focused on the delivery of climate actions'
2.5	The action below has been amended: 'Implement an enhanced system of annual monitoring of severe weather events, including the associated costs of managing/responding to those events that generated a need for emergency response. Maintain a record of the costs associated with the management of and response to severe weather events.'

Action	Summary of Modification
2.6	The action below has been amended: 'Review the Council's 'Emergency Response Protocol' for severe weather events and 'Risk Register' annually to consider the impacts of climate change and the costs associated with emergency response and remediation works/services to such events, climate risks on the delivery of emergency response services and energy response procedures to severe weather events.'
4.5	The action below has been amended: 'Advocate for both proactive national planning policy and fit for purpose national grid infrastructure in Tipperary that will support the transition to renewable energy and to ensure that local authority planning policy is aligned with national policy change and updates as they relate to national and regional renewable energy/electricity targets, guidance and support schemes.'
5.7	Amended partner column to include: 'South Tipperary Development Companies and the North Tipperary Development Companies'
7.1	The action below has been amended: 'In partnership with the Regional Waste Management Planning Offices, support the delivery of the collaborative actions and measures of the National Waste Management Plan 2024 – 2030 as they relate to circularity and climate action. Support awareness raising by the incorporation of climate action/circular economy awareness into Council-led educational programmes for example museum, libraries programmes, arts, culture and heritage, community development.'
4.1	The action below has been amended: 'Having consideration to the outcome of a feasibility assessment (Action 2.1), the Council shall consider how new development in areas determined to have both a water supply and a water quality constraint (i.e. from climate-related drought, extreme rainfall events etc.), may impact on water quality.'
5.4	The action below has been amended: 'Carry out a review of Section 4 Discharge to Water licenses determine if they are capable of meeting projected climate change related risks such as hydrological changes and water temperature increases, etc.' Tracking measure: Number of Licences reviewed.

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 SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

> *Favourable conservation status of a species can be described as being achieved when: 'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.'*
> *Favourable conservation status of a habitat can be described as being achieved when: 'its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable'.*

Generic Conservation Objectives for SACs have been provided as follows:

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

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

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

EC guidance[4] 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
DZ Opportunity Number 2	The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities and the Renewable Electricity Support Scheme.'	This amendment adds to funding/support sources previously listed The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
DZ Opportunity Number 4	The opportunity below has been amended: 'Enable sustainable renewable energy development, research and development in the area both at the commercial and community scale and advocate for grid capacity enhancement that can accommodate new investment in renewable energy development whilst ensuring that such development adheres to relevant planning and environmental protection criteria.' The following text has been added to the status: 'To be progressed over the lifetime of the Climate Action Plan noting that investment in the national grid capacity is a key dependency.' The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities and Transport for Ireland (TFI).'	This amendment is an advocacy based action which intended to support grid capacity development for the renewable energy development The status has been amended to be specific, measurable, and time bound to better support the delivery of the action. It also adds to funding/support sources previously listed. The amendments do not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
DZ Opportunity Number 7	The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities and Transport for Ireland (TFI).'	This amendment adds to funding/support sources previously listed. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
DZ Opportunity Number 8	The following text has been added to funding/support sources: 'South Tipperary Development Companies and the North Tipperary Development Companies, the Sustainable Energy Communities, the Tipperary Education and Training Board.'	This amendment adds to funding/support sources previously listed. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
DZ Opportunity Number 9	The opportunity below has been amended: 'Consider the development and implementation of a collaborative/innovative approach to nature-based and biodiversity rich land-use solutions in the area, including opportunities to consider on a catchment (or otherwise) basis to support water quality improvement, carbon capture, peatland restoration, land use diversification and flood risk management.'	This amendment clarifies the focus of the opportunity. It does not materially change the scope and intent of the defined opportunity to pursue. The amendment does not introduce additional environmental effects not already considered and mitigated against under the SEA/AA process.
DZ Action 4.3	The action below has been amended to be as follow: 'The Council and partners to explore the feasibility of the development of a renewable energy development in the area with community partnership whilst ensuring that any associated renewable energy development has appropriate regard to planning and environmental protection criteria.'	This amendment is intended to clarify the community role in the renewable energy development. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
DZ Action 9.2	The action below has been amended to include carbon capture and peatland restoration: 'Advocate for funding and supports to support land use diversification, carbon capture, peatland restoration nature-based solutions etc as a viable alternative in this area to help support sustainable income and land use management.'	This amendment clarifies the scope of funding advocacy. The amendment does not introduce additional environmental effects not already considered and mitigated against under the SEA/AA process.
1.3	The action below has been amended: 'Prepare and apply a project design stage checklist to enable and demonstrate 'Climate Proofing' of local (local authority-led) capital projects, for example; projects funded under the 'Outdoor Recreation Scheme', 'Active Travel Scheme', 'Urban Regeneration and Development Fund' etc. The intention will be to help guide the incorporation of climate actions such as biodiversity enhancement, carbon capture, walking and cycling, public transport, nature-based solutions, urban greening, rainwater harvesting, renewable energy technology, infrastructure for zero emission vehicles at project design	This amendment clarifies the scope of the action. The other amendment relates to the wording of the tracking measure. This amendment is only clerical/administrative in nature. The amendments do not introduce additional environmental effects not already considered and mitigated against under the SEA/AA process.

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
	stage etc. Significant cross-boundary projects that are already subject to Climate Change Appraisal are not subject to this process. Appropriate regard will be had to environmental protection and opportunities for promoting climate action 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.' The tracking measures for this action has been updated: • Develop 'Climate Proofing Checklist • Number of projects/developments subject to climate proofing at project development stage. Apply 'Climate Proofing Checklist' to assessment of local authority projects subject to Part 8 and Section 177AE (application to An Bord Pleanála).	
1.7	The action below has been amended: 'Climate Action to be addressed in finance management, including: (a) Consider if there is a need for a separate Revenue Budget (or some other comparable methodology) to capture Climate Action investment/expenditure (b) Review significant income sources to ascertain if it is possible to implement incentive schemes designed to positively incentivise low carbon activity.' A new KPI has been added to this action: 'Review of Finance Management Structure to be complete by Q2 2024.'	This amendment includes a consideration to assess the need for a method (such as a separate budget) to capture Climate Action investment/expenditure. The action continues have no real environmental effect when considered in isolation. The inclusion of this specific, measurable, and time bound KPI for this Plan Action better supports the delivery of the action. The amendments do not introduce additional environmental effects not already considered and mitigated against under the SEA/AA process.

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
1.18	The action below has been amended: 'To fully utilise the existing networks, forums, relationships, influence and outreach of the Council, though its various services and functions to help relate the Climate Action message to stakeholders and communities and deliver on the collaborative outward facing actions as set out in this LACAP. In this respect, the Council take a leading role in an outward facing committee of stakeholders (Sustainabletipp) focused on the delivery of climate actions'	This amendment is intended to clarify the Climate Action message delivery to the community and also to clarify the council role on doing so. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
2.5	The action below has been amended: 'Implement an enhanced system of annual monitoring of severe weather events, including the associated costs of managing/responding to those events that generated a need for emergency response. Maintain a record of the costs associated with the management of and response to severe weather events.'	This amendment is intended to include the need to Maintain a record of the costs associated with the management of and response to severe weather events. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
2.6	The action below has been amended: 'Review the Council's 'Emergency Response Protocol' for severe weather events and 'Risk Register' annually to consider the impacts of climate change and the costs associated with emergency response and remediation works/services to such events, climate risks on the delivery of emergency response services and energy response procedures to severe weather events.'	This amendment is intended to include the need to report the costs associated with severe weather events. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
4.5	The action below has been amended: 'Advocate for both proactive national planning policy and fit for purpose national grid infrastructure in Tipperary that will support the transition to renewable energy and to ensure that local authority planning policy is aligned with national policy change and updates as they relate to national and regional renewable energy/electricity targets, guidance and support schemes.'	This amendment is an advocacy based action which intended to support grid capacity development for renewable energy development. This advocacy will not any real environmental effect in and off itself. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
5.7	Amended partner column to include: 'South Tipperary Development Companies and the North Tipperary Development Companies'	This amended action continues to promote awareness and will support biodiversity protection and enhancement. The inclusion of a partner does not impact the previous assessment and does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
7.1	The action below has been amended: 'In partnership with the Regional Waste Management Planning Offices, support the delivery of the collaborative actions and measures of the National Waste Management Plan 2024 – 2030 as they relate to circularity and climate action. Support awareness raising by the incorporation of climate action/circular economy awareness into Council-led educational programmes for example museum, libraries programmes, arts, culture and heritage, community development.'	This amendment is intended to ensure partnership with Regional Waste Management Planning Offices when developing actions and measures regarding to climate action and circular economy. It promotes constructive engagement and awareness raising around circular economy concepts generally. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
4.1	The action below has been amended: 'Having consideration to the outcome of a feasibility assessment (Action 2.1), the Council shall consider how new development in areas determined to have both a water supply and a water quality constraint (i.e. from climate-related drought, extreme rainfall events etc.), may impact on water quality.'	The rewording of this action provides greater clarity on its objectives. These changes do not alter the scope of the action and therefore do not introduce additional environmental effects not already considered and mitigated against under the SEA/AA process.
5.4	The action below has been amended: 'Carry out a review of Section 4 Discharge to Water licenses determine if they are capable of meeting projected climate change related risks such as hydrological changes and water temperature increases, etc.' Tracking measure: Number of Licences reviewed.	The amendment to this action is minor and does not alter the intended meaning of the action. Therefore, the amendment does not introduce additional environmental effects not already considered and mitigated against under the SEA/AA process.

4.1 Summary of the Evaluation

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

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

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

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

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

Further assessment is therefore not required.

4.2 Other Plans and Programs

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

5. CONCLUSION

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

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

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

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

6. REFERENCES

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ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 1

Author Details

Author Details

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

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

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