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ROSCOMMON COUNTY COUNCIL CLIMATE ACTION PLAN 2024-2029

Natura Impact Report

Prepared for:

Roscommon County Council

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Natura Impact Report for the Roscommon 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 Roscommon Local Authority Climate Action Plan 2024-2029 (LACAP) 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 was undertaken alongside the preparation of the LACAP.

1.2 Post Draft Plan Consultation Modifications

This document is the final NIR which has been 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 revisions are presented in Appendix 3. The Plan modifications 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. 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 Council's County Development Plan and the 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

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.

[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.

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 production of this NIR encompasses Stage 2 of the SEA process.

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 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 THE LOCAL AUTHORITY CLIMATE ACTION PLAN

2.1 Overview

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

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

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

2.2 Context

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

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

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

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

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

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

2.3 Roscommon County Council's 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 Roscommon 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.

Roscommon 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 Plan Content

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

Table 2-1: LACAP Theme Area and Main Objectives

Theme Area	Main Objective
Governance and Leadership	Translate international, national and regional climate ambitions to a implementable level in accordance with a locally agreed vision
	Maintain Climate Actions up to date in line with emerging findings on adaptation and mitigation
	Embed the climate agenda across the organisation through corporate functions
	Develop, Coordinate and lead Climate Action initiatives at a County level
	Highlight specific climate adaptation and mitigation issues in the community and across a range of local sectors
	Facilitate Climate Action initiatives with external stakeholders
	Build capacity within the community to progress climate actions
	Feed local lessons learned upwards to enhance National responses
Built Environment and Transport	Reduce emissions across all sectors identified at the earliest possible opportunity, prioritising action related to Transport and Thermal emissions

Theme Area	Main Objective
	Ensure a climate aware response to operations, works and development across the Council area.
	Coordinate departments and mobilise communities and other stakeholders in the delivery of climate action through capacity building, support to access funding and tailored project development
	Prioritise actions focussed on areas, operators and sectors with the highest emissions to achieve targets at the earliest opportunity
	Develop internal emissions reduction solutions through the SEAI pathfinder programme and communicate progress to inspire stakeholder action
	Focus ancillary tourism facilities in established destinations to promote sustainable travel choices, rationalise investment in services and utilities, consolidate destination benefits and protect amenity assets in accordance with the National Investment framework for Transport
Natural Environment and Green Infrastructure	Support and align with provisions in the RCC heritage, biodiversity and county development plans
	Engage with local stakeholders to progress projects under the regenerative tourism element of the JTF
	Promote the conservation, sensitive refurbishment and reuse of heritage buildings and structures to prevent collapse, reduce dereliction and vacancy and revitalise Urban and Village centres
	To identify and assess climate based risks to heritage and take pre-emptive measures to increase resilience and prevent heritage loss
	Promote the sensitive utilisation of heritage resources to ensure conservation, maintain profile and relevance to the wider public
	Maintain, augment and enhance green infrastructural resources to provide ecosystem services and amenity benefits
	Promote heritage, biodiversity and climate action awareness in the management and maintenance of Local Authority assets, landbank and properties.
	Develop a range of pilot initiatives to showcase best practice in heritage, biodiversity and green infrastructure in a climate action context.
	Establish and coordinate appropriate links between the LA and external bodies to mobilise action in the areas of agriculture and renewable energy
Communities, Resilience and Transition	Support climate action ambition within the LECP, LEADER programme, Creative Ireland Programme, Enterprise development policy and social and economic structures within and associated with RCC

Theme Area	Main Objective
	Ensure that climate actions are sufficiently robust to adjust effectively as targeted information becomes available
	Align with the just transition process to ensure that those communities most affected by the transition to a low carbon society have access to enhanced social, economic and environmental opportunities
	Embed climate resilience in design, operation and maintenance of all functional areas within RCC
	Promote research, innovation and new approaches in the areas of climate action adaptation and mitigation
	Engage with the business community in the management of food and other wastes in support of a circular economy
	Coordinate with representative groups from the agricultural community on how RCC can develop appropriate links to deliver reductions in agricultural emissions over the lifetime of the plan
	Engage with the strong County network of community volunteers and support climate action efforts across this sector through training, education and appropriate access to funding streams
Sustainability and Resource Management	Engage the community and agricultural sector in the promotion of waste reduction and circular economic activities by facilitating connections with state agencies and appropriate funding streams
	Investigate the expansion of reuse/recycle facilities at civic amenity sites in County Roscommon in support of the circular economy
	Mobilise support for local circular economic initiatives through existing enterprise structures
	Engage all citizens in the promotion of waste reduction and circular economic activities in daily life
	Ensure that existing, planned and proposed infrastructure is protected from the future potential effects of climate change
	Prioritise development of vacant, underused or derelict lands/buildings in serviced urban areas and degraded lands in rural areas as potential locations for spatially-based climate actions
	Manage RCC assets to achieve national emissions reductions targets.
	Promote community awareness of emission reduction potential in transport and encourage more sustainable choices and behaviours
Roscommon Town Decarbonisation Zone	Undertake retrofitting on existing housing stock to achieve BER rating of B2 and develop facilities to measure, manage and understand energy use and trends in demand.

Theme Area	Main Objective
	Develop education and awareness around energy efficiency in residential settings
	Promote the achievement of NZEB standard - investigate the application of low-carbon alternatives and renewable energy
	Optimise the energy efficiency of existing commercial and public sector buildings to meet national carbon targets and realise RCC role as a leader in the low carbon transition process in the built environment.
	Leverage the public procurement process to embed low carbon, sustainable criteria at the earliest stages of new public sector building developments.
	Support the policy provisions contained in the RCC CDP 2022-'28 Chapter 8 in terms of supporting and promoting research and development facilities in support of renewable energy
	Support the policy provisions contained in the RCC CDP 2022-'28 Chapter 8 in support of prioritising nature-based solutions to develop climate resilient urban and rural communities
	Support the policy provisions contained in the RCC CDP 2022-'28 Chapters 7 & 8 and the Roscommon Town Approaches and Movement Study (RCC 2023), in terms of integrating land use and transport, promoting active travel and public transport use and the production of an area based transport plan for Roscommon town, and any supporting policy to be contained in the upcoming RTLAP
	Support the policy provisions contained in the RCC CDP 2022-'28 Chapters 7& 8 in the context developing waste management and circular economic solutions.
	Build capacity in the local and business community, supported by a robust RCC internal climate action network throughout all its functions, to support waste minimisation and the circular economy in Roscommon town
	Provide targeted support for external initiatives such as innovation and knowledge sharing hubs for the local and business community, utilising specialist operators and 3rd level institutions.

2.5 Overall Vision and Strategic Outcomes

The overall vision of the LACAP is to deliver an empowered, enabled and equitable transition to a carbon neutral economy and society.

The mission of the LACAP is:

> *"Roscommon County Council, through the management of our resources and assets in the delivery of our services through engagement with communities and all sectors of society, will implement targeted climate actions in support of the national climate objective and a sustainable future."*

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

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

The overall vision of the Roscommon Town Decarbonising Zone is to deliver a community that builds on its success, creates new prospects and showcases innovation and creativity in shaping future economic, social and environmental development in the context of climate action and just transition.

The mission of the Roscommon Town Decarbonising Zone is:

> *" Roscommon County Council, through collaboration and engagement with the local community, businesses, individuals, state agencies, departments and relevant bodies, will deliver an ambitious range of climate actions in Roscommon Town to showcase innovation and secure opportunities in the transition to a carbon neutral economy and society."*

2.5.1 Overview

Under Section 14B of the Climate Action and Low Carbon Development Amendment Act 2021, each local authority is required to prepare a Climate Action Plan relating to a period of five years which specifies the mitigation and adaptation measures to be adopted by the local authority. As noted, the plan must address each of the following thematic areas of climate action:

- **Climate Change Mitigation** which relates to changing how we live, move, consume and manufacture, so as to reduce and/or eliminate the production of harmful greenhouse gases, it also includes how we best use our land; and
- **Climate Change Adaptation** which refers to dealing with the impacts of climate change and involves taking practical actions to manage risks, protect communities and strengthen the resilience of the economy (e.g. from flooding, extreme weather events etc).

In line with this statutory requirement, Roscommon County Council has prepared Climate Action Plan 2024-2029 (CAP) to create a low carbon and climate resilient county, by delivering and promoting best practice in climate action, at the local level. This is aligned to the Government's overall National Climate Objective, which seeks to pursue and achieve, by no later than the end of 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

The CAP will set a clear pathway for Roscommon County Council 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; and
- 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, through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.

2.5.2 Methodology

In March 2023, the Department of the Environment, Climate and Communications published Local Authority Climate Action Plan Guidelines to support the local authorities in developing the Local Authority Climate Action Plans (LACAP) in response to Section 16 of the Climate Amendment Act 2021. There are five distinct elements to these guidelines that culminate to provide robust guidance in the development of local authority climate action plans:

- Local Authority Climate Action Plan Guidelines;
- Technical Annex A: Developing and Implementing the Local Authority Climate Action Plan;
- Technical Annex B: Climate Change Risk Assessment;
- Technical Annex C: Climate Mitigation Assessment; and
- Technical Annex D: Decarbonising Zones (DZs).

These guidelines have been supplemented with additional training, information and guidance from the Climate Action Regional Office (CARO) and Roscommon County Council has applied this guidance in full to inform the development of the CAP.

2.5.3 Development of the Climate Action Plan

In developing the CAP a series of actions were undertaken to support the evolution of the policy framework as follows:

- **Policy Review** – a detailed policy review was undertaken to consider both existing and pending policy and legislation that may shape the sectors and actions under consideration. This review included EU and national climate policy, other environmental, energy and transport policy as well as national and local land use policy such as the County Development Plan.
- **Best Practice Review** – entailing a review of best climate action practice within other local authorities within the State and within other EU Member States to identify novel or emerging issues of relevance to the county;
- **Stakeholder Engagement** – entailing significant engagement with local councillors, neighbouring local authorities, the citizens of the county, local business leaders and farming groups. Each of these engagements sought to explore opportunities and constraints around climate action and to elicit the broad spectrum views on the key considerations for delivering the CAP;

- **Baseline Emissions Inventory** – which was a detailed climate mitigation assessment to inform the CAP on the 2018 baseline sources and scale of emissions within the county and the identified decarbonising zone to inform the areas with greatest need for action in the CAP;
- **Climate change risk assessment** - to understand the current and future risks posed by climate change to Roscommon County Council assets and activities and to enable and understanding of understand the likelihood of current and future climate hazards, the potential impacts of these hazards at local and community levels and support the development of adaptation actions to avoid or reduce the impacts of climate risks; and
- **Decarbonising Zone** – identification and assessment of a decarbonising zone (DZ) within the county in line with Action 165 of Climate Action Plan 2019. Roscommon County Council has identified Maynooth as the DZ as Maynooth has several advantages that makes the town ideal as a DZ to act as a test bed for the county to assess the viability for wide roll out of measures to other large towns in the county.

On foot of the evidence base gathered a policy framework for the CAP (with a similar framework for the DZ) has been developed in line with the relevant guidance and will be presented in the CAP as follows:

- An overarching **Vision** that reflects the shared perspective of a climate resilient and climate neutral future.
- A plan **Mission** that speaks practically to the grounded purpose of the local authority in delivering effective climate action.
- **Strategic Goals** that set the context for the climate actions and establish a structured or thematic arrangement of actions and these are developed under the CARO recommended framework of five goals as follows:
  - Governance and Leadership;
  - Built Environment & Transport;
  - Natural Environment and Green Infrastructure;
  - Communities; Resilience & Transitions; and
  - Sustainability & Resource Management.
- High level **Objectives** that support the delivery of the strategic goals whilst framing the appropriate emphasis of the actions.
- **Actions** that are specific, action-focused, time-bound and measurable reflecting a scaling up of ambitious local level climate action.

The main focus for implementation of the plan will be through the delivery of actions. These actions are devised to ensure that RCC can practically achieve and deliver these actions over the timeframes assigned and within the capacity available.

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[4] or species[5] 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.

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).

[4] 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.
[5] 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.

Conservation objectives that have been considered by the assessment are included in the following National Parks and Wildlife Service documents:

- NPWS (2022) Conservation Objectives for River Shannon Callows SAC [IE0000216] Version 1.
- NPWS (2017) Conservation Objectives for Coolcam Turlough SAC [IE0000218] Version 1.
- NPWS (2017) Conservation Objectives for Croaghill Turlough SAC [IE0000255] Version 1.
- NPWS (2013) Conservation Objectives for Galway Bay Complex SAC [IE0000268] Version 1.
- NPWS (2015) Conservation Objectives for Kilsallagh Bog SAC [IE0000285] Version 1.
- NPWS (2020) Conservation Objectives for Levally Lough SAC [IE0000295] Version 1.
- NPWS (2016) Conservation Objectives for Lisnageeragh Bog and Ballinastack Turlough SAC [IE0000296] Version 1.
- NPWS (2017) Conservation Objectives for Lough Corrib SAC [IE0000297] Version 1.
- NPWS (2016) Conservation Objectives for Lough Lurgeen Bog/Glenamaddy Turlough SAC [IE0000301] Version 1.
- NPWS (2015) Conservation Objectives for Shankill West Bog SAC [IE0000326] Version 1.
- NPWS (2016) Conservation Objectives for Lough Ree SAC [IE0000440] Version 1.
- NPWS (2018) Conservation Objectives for Fortwilliam Turlough SAC [IE0000448] Version 1.
- NPWS (2012) Conservation Objectives for Killala Bay/Moy Estuary SAC [IE0000458] Version 1.
- NPWS (2020) Conservation Objectives for Doocastle Turlough SAC [IE0000492] Version 1.
- NPWS (2016) Conservation Objectives for Flughany Bog SAC [IE0000497] Version 1.
- NPWS (2016) Conservation Objectives for All Saints Bog and Esker SAC [IE0000566] Version 1.
- NPWS (2015) Conservation Objectives for Ferbane Bog SAC [IE0000575] Version 1.
- NPWS (2019) Conservation Objectives for Fin Lough (Offaly) SAC [IE0000576] Version 1.
- NPWS (2016) Conservation Objectives for Mongan Bog SAC [IE0000580] Version 1.
- NPWS (2015) Conservation Objectives for Moyclare Bog SAC [IE0000581] Version 1.
- NPWS (2016) Conservation Objectives for Cuilcagh - Anierin Uplands SAC [IE0000584] Version 1.
- NPWS (2018) Conservation Objectives for Ballinturly Turlough SAC [IE0000588] Version 1.
- NPWS (2015) Conservation Objectives for Bellanagare Bog SAC [IE0000592] Version 1.
- NPWS (2016) Conservation Objectives for Callow Bog SAC [IE0000595] Version 1.
- NPWS (2015) Conservation Objectives for Carrowbehy/Caher Bog SAC [IE0000597] Version 1.
- NPWS (2016) Conservation Objectives for Cloonchambers Bog SAC [IE0000600] Version 1.
- NPWS (2015) Conservation Objectives for Derrinea Bog SAC [IE0000604] Version 1.
- NPWS (2017) Conservation Objectives for Errit Lough SAC [IE0000607] Version 1.
- NPWS (2018) Conservation Objectives for Lisduff Turlough SAC [IE0000609] Version 1.
- NPWS (2018) Conservation Objectives for Lough Croan Turlough SAC [IE0000610] Version 1.
- NPWS (2018) Conservation Objectives for Lough Funshinagh SAC [IE0000611] Version 1.
- NPWS (2018) Conservation Objectives for Mullygollan Turlough SAC [IE0000612] Version 1.
- NPWS (2016) Conservation Objectives for Cloonshanville Bog SAC [IE0000614] Version 1.
- NPWS (2013) Conservation Objectives for Ballysadare Bay SAC [IE0000622] Version 1.

- NPWS (2021) Conservation Objectives for Templehouse and Cloonacleigha Loughs SAC [IE0000636] Version 1.
- NPWS (2021) Conservation Objectives for Turloughmore (Sligo) SAC [IE0000637] Version 1.
- NPWS (2015) Conservation Objectives for Carrownagappul Bog SAC [IE0001242] Version 1.
- NPWS (2017) Conservation Objectives for Urlaur Lakes SAC [IE0001571] Version 1.
- NPWS (2021) Conservation Objectives for Castlesampson Esker SAC [IE0001625] Version 1.
- NPWS (2019) Conservation Objectives for Annaghmore Lough (Roscommon) SAC [IE0001626] Version 1.
- NPWS (2018) Conservation Objectives for Four Roads Turlough SAC [IE0001637] Version 1.
- NPWS (2021) Conservation Objectives for Bricklieve Mountains & Keishcorran SAC [IE0001656] Version 1.
- NPWS (2021) Conservation Objectives for Lough Arrow SAC [IE0001673] Version 1.
- NPWS (2018) Conservation Objectives for Pilgrim's Road Esker SAC [IE0001776] Version 1.
- NPWS (2016) Conservation Objectives for Lough Forbes Complex SAC [IE0001818] Version 1.
- NPWS (2021) Conservation Objectives for Unshin River SAC [IE0001898] Version 1.
- NPWS (2019) Conservation Objectives for Cloonakillina Lough SAC [IE0001899] Version 1.
- NPWS (2021) Conservation Objectives for Lough Gill SAC [IE0001976] Version 1.
- NPWS (2016) Conservation Objectives for Boleybrack Mountain SAC [IE0002032] Version 1.
- NPWS (2016) Conservation Objectives for Corliskea/Trien/Cloonfelliv Bog SAC [IE0002110] Version 1.
- NPWS (2012) Conservation Objectives for Lower River Shannon SAC [IE0002165] Version 1.
- NPWS (2022) Conservation Objectives for Ballygar (Aghrane) Bog SAC [IE0002199] Version 9.
- NPWS (2022) Conservation Objectives for Aughrim (Aghrane) Bog SAC [IE0002200] Version 9.
- NPWS (2022) Conservation Objectives for Mount Jessop Bog SAC [IE0002202] Version 9.
- NPWS (2018) Conservation Objectives for Glenloughaun Esker SAC [IE0002213] Version 1.
- NPWS (2018) Conservation Objectives for Killeglan Grassland SAC [IE0002214] Version 1.
- NPWS (2019) Conservation Objectives for Lough Derg, North-East Shore SAC [IE0002241] Version 1.
- NPWS (2018) Conservation Objectives for Williamstown Turloughs SAC [IE0002296] Version 1.
- NPWS (2016) Conservation Objectives for River Moy SAC [IE0002298] Version 1.
- NPWS (2015) Conservation Objectives for Carn Park Bog SAC [IE0002336] Version 1.
- NPWS (2016) Conservation Objectives for Crosswood Bog SAC [IE0002337] Version 1.
- NPWS (2016) Conservation Objectives for Drumalough Bog SAC [IE0002338] Version 1.
- NPWS (2016) Conservation Objectives for Ballynamona Bog and Corkip Lough SAC [IE0002339] Version 1.
- NPWS (2016) Conservation Objectives for Brown Bog SAC [IE0002346] Version 1.
- NPWS (2015) Conservation Objectives for Camderry Bog SAC [IE0002347] Version 1.
- NPWS (2016) Conservation Objectives for Clooneen Bog SAC [IE0002348] Version 1.
- NPWS (2015) Conservation Objectives for Corbo Bog SAC [IE0002349] Version 1.
- NPWS (2015) Conservation Objectives for Curraghlehanagh Bog SAC [IE0002350] Version 1.

- NPWS (2015) Conservation Objectives for Redwood Bog SAC [IE0002353] Version 1.
- NPWS (2015) Conservation Objectives for Tullaghanrock Bog SAC [IE0002354] Version 1.
- NPWS (2015) Conservation Objectives for Ardgraigue Bog SAC [IE0002356] Version 1.
- NPWS (2022) Generic Conservation Objectives for Mongan Bog SPA [IE0004017] Version 9.
- NPWS (2013) Conservation Objectives for Inner Galway Bay SPA [IE0004031] Version 1.
- NPWS (2013) Conservation Objectives for Killala Bay/Moy Estuary SPA [IE0004036] Version 1.
- NPWS (2022) Generic Conservation Objectives for Lough Gara SPA [IE0004048] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Arrow SPA [IE0004050] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Derg (Shannon) SPA [IE0004058] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Ree SPA [IE0004064] 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 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 Ballykenny-Fisherstown Bog SPA [IE0004101] Version 9.
- NPWS (2022) Generic Conservation Objectives for All Saints Bog SPA [IE0004103] Version 9.
- NPWS (2022) Generic Conservation Objectives for Bellanagare Bog SPA [IE0004105] Version 9.
- NPWS (2013) Conservation Objectives for Ballysadare Bay SPA [IE0004129] Version 1.
- NPWS (2022) Generic Conservation Objectives for Lough Croan Turlough SPA [IE0004139] Version 9.
- NPWS (2022) Generic Conservation Objectives for Four Roads Turlough SPA [IE0004140] Version 9.

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:

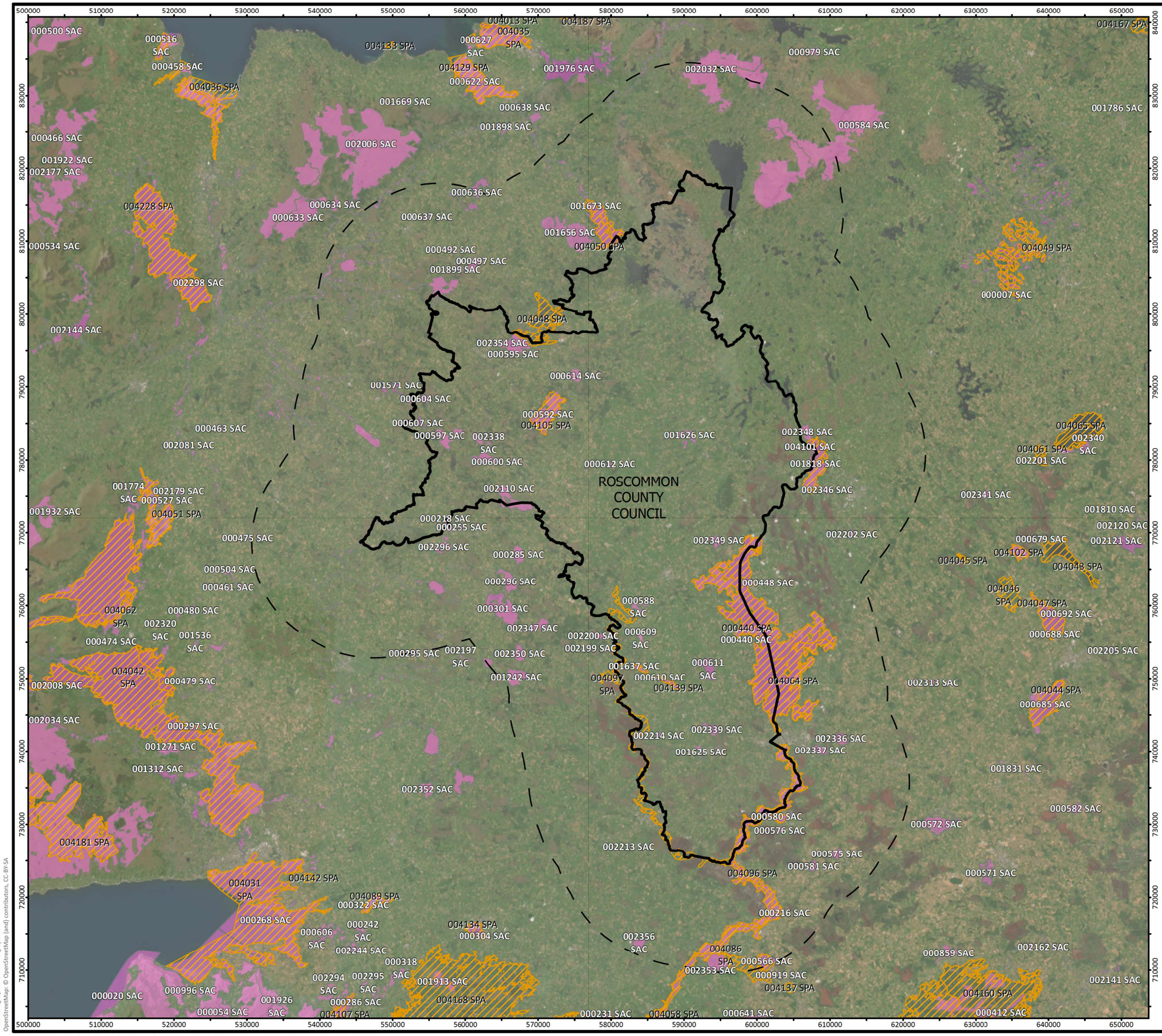
- *Arising from both construction and operation of development and associated infrastructure:*
  - *Loss of/damage to biodiversity in designated sites (including European sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and 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.

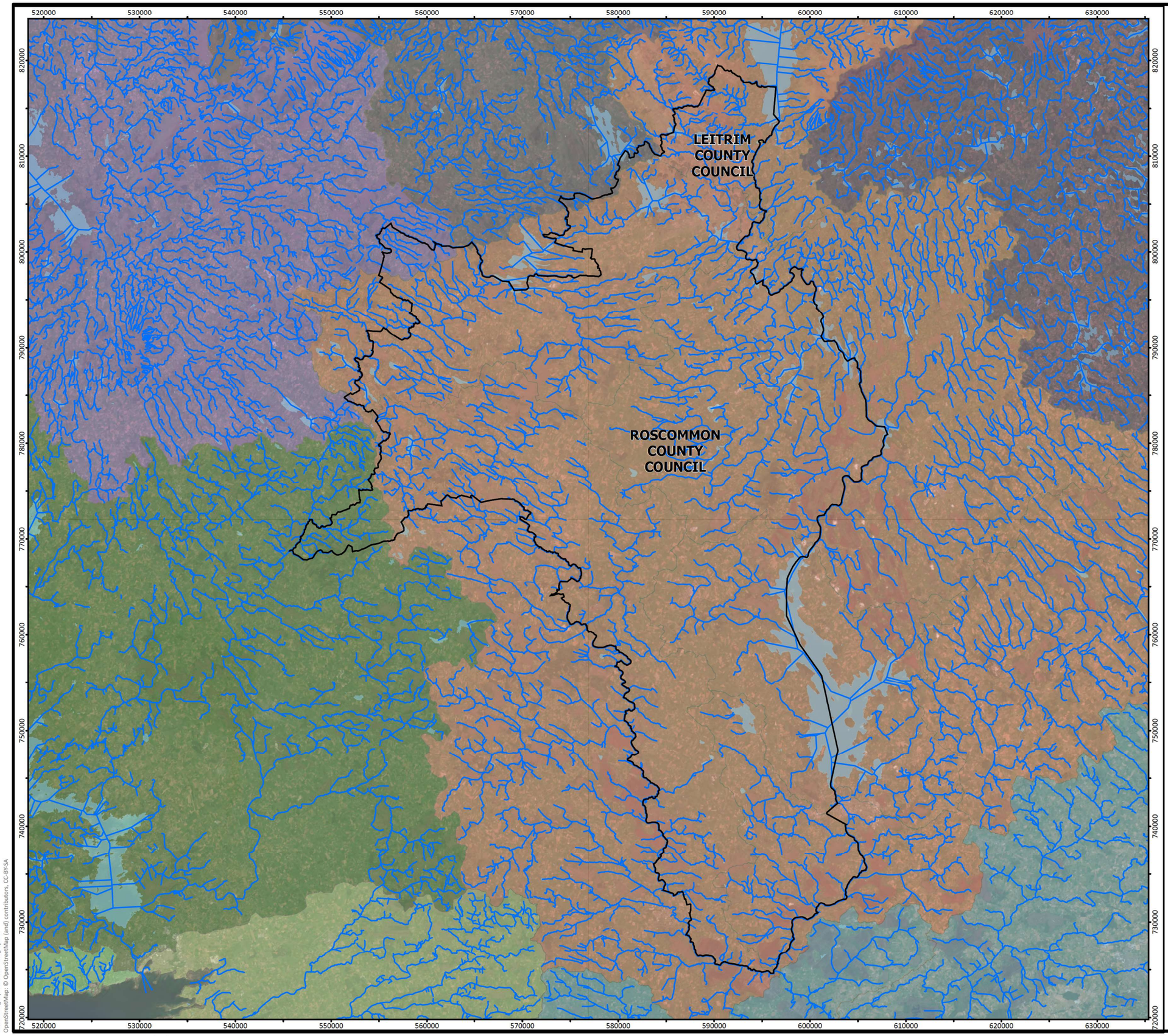
3.3.3 Screening of Sites

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.



Path: R:\Map Production\2023\P23-076\Workspaces\NIR\P23_076_Fig_3_1_Special_Areas_of_Conservation_and_Special_Protected_Areas_Longford.aprx



Legend

- Local Authority Boundaries
- Rivers

WFD Catchments

Catchment Name

- Corrib
- Erne
- Galway Bay North
- Galway Bay South East
- Lower Shannon
- Moy & Killala Bay
- Sligo Bay & Drowse
- Upper Shannon

Hydrology

ROSCOMMON COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	3.2
CLIENT:	ROSCOMMON COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:390,000 @ A3

N W E S

0 3 5 10 km

FEHILY TIMONEY

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Path: R:\Map Production\2023\P23-076\Workspaces\NIR\P23_076_Fig_3-2 Hydrology.aprx

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

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000216	River Shannon Callows SAC	0	Otter (Lutra lutra) [1355], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Alkaline fens [7230], Limestone pavements [8240], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	The European Site is within the Roscommon County 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
000218	Coolcam Turlough SAC	0	Turloughs [3180]	The European Site is within the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes
000297	Lough Corrib SAC	0	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], Sea lamprey (Petromyzon marinus) [1095], Limestone pavements [8240], Atlantic salmon (Salmo salar) [1106], Lesser	The European Site is within the Roscommon County LACAP area.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			horseshoe bat (Rhinolophus hipposideros) [1303], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130], Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Slender green feather-moss (Hamatocaulis vernicosus) [6216], Petrifying springs with tufa formation (Cratoneurion) [7220], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], 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], Alkaline fens [7230], Depressions on peat substrates of the Rhynchosporion [7150], Slender naiad (Najas flexilis) [1833], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Otter (Lutra lutra) [1355], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Brook lamprey (Lampetra planeri) [1096], White-clawed crayfish (Austropotamobius pallipes) [1092], Active raised bogs [7110]	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.		

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000440	Lough Ree SAC	0	Otter (Lutra lutra) [1355], Limestone pavements [8240], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Degraded raised bogs still capable of natural regeneration [7120], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], Alkaline fens [7230], Active raised bogs [7110], Bog woodland [91D0]	The European Site is within the Roscommon County 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
000588	Ballinturly Turlough SAC	0	Turloughs [3180]	The European Site is within the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes
000592	Bellanagare Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	The European Site is within the Roscommon County LACAP area.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	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. 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.		
000595	Callow Bog SAC	0	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	The European Site is within the Roscommon County 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
000597	Carrowbehy/ Caher Bog SAC	0	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	The European Site is within the Roscommon County 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	Qualifying Feature	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 the potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
000600	Cloonchambers Bog SAC	0	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	The European Site is within the Roscommon County 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
000604	Derrinea Bog SAC	0	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	The European Site is within the Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				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.		
000607	Errit Lough SAC	0	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	The European Site is within the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes
000609	Lisduff Turlough SAC	0	Turloughs [3180]	The European Site is within the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000610	Lough Croan Turlough SAC	0	Turloughs [3180]	The European Site is within the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes
000611	Lough Funshinagh SAC	0	Turloughs [3180], Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation [3270]	The European Site is within the Roscommon County 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
000612	Mullygollan Turlough SAC	0	Turloughs [3180]	The European Site is within the Roscommon County 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	Qualifying Feature	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 the potential for significant effects to this European Site and its Qualifying Interest as a result of activities proposed under the LACAP.		
000614	Cloonshanville Bog SAC	0	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0]	The European Site is within the Roscommon County 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
001571	Urlaur Lakes SAC	0	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	The European Site is within the Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is the potential for significant effects to this European Site and its Qualifying Interest as a result of activities proposed under the LACAP.		
001625	Castlesampson Esker SAC	0	Turloughs [3180], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	The European Site is within the Roscommon County 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
001626	Annaghmore Lough (Roscommon) SAC	0	Geyer`s whorl snail (Vertigo geyeri) [1013], Alkaline fens [7230]	The European Site is within the Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
001637	Four Roads Turlough SAC	0	Turloughs [3180]	The European Site is within the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes
001673	Lough Arrow SAC	0	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	The European Site is within the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes
001818	Lough Forbes Complex SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Natural	The European Site is within the Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], Active raised bogs [7110]	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.		
002110	Corliskea/Trien/Cloonfelliv Bog SAC	0	Depressions on peat substrates of the Rhynchosporion [7150], Bog woodland [91D0], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	The European Site is within the Roscommon County 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
002214	Killeglan Grassland SAC	0	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	The European Site is within the Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is the potential for significant effects to this European Site and its Qualifying Interest as a result of activities proposed under the LACAP.		
002298	River Moy SAC	0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Brook lamprey (Lampetra planeri) [1096], Sea lamprey (Petromyzon marinus) [1095], Depressions on peat substrates of the Rhynchosporion [7150], White-clawed crayfish (Austropotamobius pallipes) [1092], Atlantic salmon (Salmo salar) [1106], Active raised bogs [7110], Alkaline fens [7230], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Degraded raised bogs still capable of natural regeneration [7120], Otter (Lutra lutra) [1355]	The European Site is within the Roscommon County 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
002338	Drumalough Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	The European Site is within the Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002339	Ballynamona Bog and Corkip Lough SAC	0	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120], Turloughs [3180]	The European Site is within the Roscommon County 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
002349	Corbo Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	The European Site is within the Roscommon County 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
002354	Tullaghanrock Bog SAC	0	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	The European Site is within the Roscommon County 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	Qualifying Feature	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 the potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
004048	Lough Gara SPA	0	Whooper Swan (Cygnus cygnus) [A038], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	There is a separation distance of 0m between this European Site and the area of Roscommon County LACAP. There is the potential for significant effects to this European Site and its Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
004050	Lough Arrow SPA	0	Tufted Duck (Aythya fuligula) [A061], Little Grebe (Tachybaptus ruficollis) [A004], Wetland and Waterbirds [A999]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004064	Lough Ree SPA	0	Common tern (Sterna hirundo) [A193], Teal (Anas crecca) [A052], Tufted Duck (Aythya fuligula) [A061], Shoveler (Anas clypeata) [A056], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Mallard (Anas platyrhynchos) [A053], Golden Plover (Pluvialis apricaria) [A140], Lapwing (Vanellus vanellus) [A142], Wetland and Waterbirds [A999], Goldeneye (Bucephala clangula) [A067], Little Grebe (Tachybaptus ruficollis) [A004], Coot (Fulica atra) [A125], Common Scoter (Melanitta nigra) [A065]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
004096	Middle Shannon Callows SPA	0	Wigeon (Anas penelope) [A050], Black-tailed Godwit (Limosa limosa) [A156], Whooper Swan (Cygnus cygnus) [A038], Black-headed Gull (Chroicocephalus ridibundus) [A179], Lapwing (Vanellus vanellus) [A142], Wetland and Waterbirds [A999], Corncrake (Crex crex) [A122], Golden Plover (Pluvialis apricaria) [A140]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004097	River Suck Callows SPA	0	Wetland and Waterbirds [A999], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Whooper Swan (Cygnus cygnus) [A038], Golden Plover (Pluvialis apricaria) [A140], Lapwing (Vanellus vanellus) [A142], Wigeon (Anas penelope) [A050]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
004101	Ballykenny-Fisherstown Bog SPA	0	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004105	Bellanagare Bog SPA	0	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
004139	Lough Croan Turlough SPA	0	Wetland and Waterbirds [A999], Golden Plover (Pluvialis apricaria) [A140], Shoveler (Anas clypeata) [A056], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004140	Four Roads Turlough SPA	0	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Golden Plover (Pluvialis apricaria) [A140], Wetland and Waterbirds [A999]	The European Site is within the Roscommon County 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 Special Conservation Interests as a result of activities proposed under the LACAP.	Yes	Yes
001776	Pilgrim's Road Esker SAC	0.15	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	The European Site is within 500m of the Roscommon County 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 Interest as a result of activities proposed under the LACAP.	Yes	Yes
002348	Clooneen Bog SAC	0.19	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Bog woodland [91D0], Active raised bogs [7110]	The European Site is within 500m of the Roscommon County LACAP area.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	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. 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.		
002296	Williamstown Turloughs SAC	0.33	Turloughs [3180]	There is a separation distance of ca. 330 m between this European Site and the area of Roscommon 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 Interest of this European site as a result of activities proposed under the LACAP.	Yes	Yes
000580	Mongan Bog SAC	0.44	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	The European Site is within 500m of the Roscommon County 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	Qualifying Feature	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 the potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002200	Aughrim (Aghrane) Bog SAC	0.67	Degraded raised bogs still capable of natural regeneration [7120]	There is a separation distance of ca. 670 m between this European Site and the area of Roscommon County 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 Interest as a result of activities proposed under the LACAP.	No	No
004017	Mongan Bog SPA	0.75	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	This European Site is within 15km of the area of Roscommon 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.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	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. There is the potential for significant effects to the Special Conservation Interest of this European site as a result of activities proposed under the LACAP.		
000255	Croaghill Turlough SAC	1.17	Turloughs [3180]	There is a separation distance of ca. 1.17 km between this European Site and the area of Roscommon 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
000576	Fin Lough (Offaly) SAC	2.02	Geyer`s whorl snail (Vertigo geyeri) [1013], Alkaline fens [7230]	There is a separation distance of ca. 2.02 km between this European Site and the area of Roscommon 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.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	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. There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.		
001656	Bricklieve Mountains & Keishcorran SAC	2.14	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], White-clawed crayfish (Austropotamobius pallipes) [1092], Turloughs [3180], Marsh Fritillary (Euphydryas aurinia) [1065], Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) [8120], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510]	There is a separation distance of ca. 2.14 km between this European Site and the area of Roscommon 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
002199	Ballygar (Aghrane) Bog SAC	2.72	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	There is a separation distance of ca. 2.72 km between this European Site and the area of Roscommon County LACAP. The LACAP provides for actions which may result in land use change and infrastructure development etc.	No	No

Site Code	Site Name	Distance	Qualifying Feature	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.		
000584	Cuilcagh - Anierin Uplands SAC	2.9	Transition mires and quaking bogs [7140], Blanket bogs * if active bog [7130], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], European dry heaths [4030], Northern Atlantic wet heaths with Erica tetralix [4010], Natural dystrophic lakes and ponds [3160], Slender green feather-moss (Hamatocaulis vernicosus) [6216], Siliceous rocky slopes with chasmophytic vegetation [8220], Petrifying springs with tufa formation (Cratoneurion) [7220], Alpine and Boreal heaths [4060], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	There is a separation distance of ca. 2.9 km between this European Site and the area of Roscommon 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
002346	Brown Bog SAC	2.98	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 ca. 2.98 km between this European Site and the area of Roscommon County LACAP.	No	No

Site Code	Site Name	Distance	Qualifying Feature	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.		
002337	Crosswood Bog SAC	3.17	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	There is a separation distance of ca. 3.17 km between this European Site and the area of Roscommon County 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
000448	Fortwilliam Turlough SAC	3.37	Turloughs [3180]	There is a separation distance of ca. 3.37 km between this European Site and the area of Roscommon County LACAP and a potential groundwater connection is present.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	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 Interest of this European site as a result of activities proposed under the LACAP.		
000285	Kilsallagh Bog SAC	3.78	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	There is a separation distance of ca. 3.78 km between this European Site and the area of Roscommon County 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
001899	Cloonakillina Lough SAC	3.81	Transition mires and quaking bogs [7140]	There is a separation distance of ca. 3.81 km between this European Site and the area of Roscommon County LACAP and a potential groundwater connection is present.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	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 Interest of this European site as a result of activities proposed under the LACAP.		
002213	Glenloughaun Esker SAC	4.64	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	There is a separation distance of ca. 4.64 km between this European Site and the area of Roscommon County 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
000497	Flughany Bog SAC	4.66	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 ca. 4.66 km between this European Site and the area of Roscommon County LACAP.	No	No

Site Code	Site Name	Distance	Qualifying Feature	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.		
002347	Camderry Bog SAC	4.77	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	There is a separation distance of ca. 4.77 km between this European Site and the area of Roscommon County 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
000296	Lisnageeragh Bog and Ballinastack Turlough SAC	5.16	Depressions on peat substrates of the Rhynchosporion [7150], Turloughs [3180], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	There is a separation distance of ca. 5.16 km between this European Site and the area of Roscommon County LACAP and a potential groundwater connection is present.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	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.		
000492	Doocastle Turlough SAC	5.71	Turloughs [3180]	There is a separation distance of ca. 5.71 km between this European Site and the area of Roscommon 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
002336	Carn Park Bog SAC	6.2	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	There is a separation distance of ca. 6.2 km between this European Site and the area of Roscommon County LACAP.	No	No

Site Code	Site Name	Distance	Qualifying Feature	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.		
001898	Unshin River SAC	6.47	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Atlantic salmon (Salmo salar) [1106], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Otter (Lutra lutra) [1355]	There is a separation distance of ca. 6.47 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 7.64 km (instream 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

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	7.15	Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation [3270], Degraded raised bogs still capable of natural regeneration [7120], Turloughs [3180], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	There is a separation distance of ca. 7.15 km between this European Site and the area of Roscommon 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
000581	Moyclare Bog SAC	8.24	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 ca. 8.24 km between this European Site and the area of Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000575	Ferbane Bog SAC	8.93	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	There is a separation distance of ca. 8.93 km between this European Site and the area of Roscommon County 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
002032	Boleybrack Mountain SAC	9.24	European dry heaths [4030], Blanket bogs * if active bog [7130], Northern Atlantic wet heaths with Erica tetralix [4010], Natural dystrophic lakes and ponds [3160], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	There is a separation distance of ca. 9.24 km between this European Site and the area of Roscommon 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

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002202	Mount Jessop Bog SAC	9.38	Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0]	There is a separation distance of ca. 9.38 km between this European Site and the area of Roscommon County 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
002350	Curraghlehanagh Bog SAC	9.6	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	There is a separation distance of ca. 9.6 km between this European Site and the area of Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000637	Turloughmore (Sligo) SAC	9.92	Turloughs [3180]	There is a separation distance of ca. 9.92 km between this European Site and the area of Roscommon 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 Interest of this European site as a result of activities proposed under the LACAP.	Yes	Yes
004086	River Little Brosna Callows SPA	11.44	Golden Plover (Pluvialis apricaria) [A140], Black-headed Gull (Chroicocephalus ridibundus) [A179], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Wetland and Waterbirds [A999], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Teal (Anas crecca) [A052], Lapwing (Vanellus vanellus) [A142], Black-tailed Godwit (Limosa limosa) [A156], Pintail (Anas acuta) [A054], Shoveler (Anas clypeata) [A056]	This European Site is within 15km of the area of Roscommon 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000636	Templehouse and Cloonacleigha Loughs SAC	11.61	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	There is a separation distance of ca. 11.61 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 29.19 km (instream 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
001242	Carrownagappul Bog SAC	11.85	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	There is a separation distance of ca. 11.85 km between this European Site and the area of Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002353	Redwood Bog SAC	12.31	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 ca. 12.31 km between this European Site and the area of Roscommon County 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
002356	Ardgraigue Bog SAC	12.56	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	There is a separation distance of ca. 12.56 km between this European Site and the area of Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004103	All Saints Bog SPA	13.16	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	This European Site is within 15km of the area of Roscommon 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 Interest of this European site as a result of activities proposed under the LACAP.	Yes	Yes
000566	All Saints Bog and Esker SAC	13.18	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120]	There is a separation distance of ca. 13.18 km between this European Site and the area of Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
001976	Lough Gill SAC	13.34	Sea lamprey (Petromyzon marinus) [1095], Brook lamprey (Lampetra planeri) [1096], Atlantic salmon (Salmo salar) [1106], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Otter (Lutra lutra) [1355], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], River lamprey (Lampetra fluviatilis) [1099], White-clawed crayfish (Austropotamobius pallipes) [1092], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	There is a separation distance of ca. 13.34 km between this European Site and the area of Roscommon 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
000326	Shankill West Bog SAC	14.04	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	There is a separation distance of ca. 14.04 km between this European Site and the area of Roscommon County 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	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000295	Levally Lough SAC	14.65	Turloughs [3180]	There is a separation distance of ca. 14.65 km between this European Site and the area of Roscommon 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 Interest of this European site as a result of activities proposed under the LACAP.	Yes	Yes
002241	Lough Derg North east shore SAC	22.02	Taxus baccata woods of the British Isles [91J0], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Juniperus communis formations on heaths or calcareous grasslands [5130], Alkaline fens [7230], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Limestone pavements [8240]	There is a separation distance of ca. 22.02 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 35.27 km (instream 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

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004058	Lough Derg Shannon SPA	22.02	Goldeneye (Bucephala clangula) [A067], Tufted Duck (Aythya fuligula) [A061], Wetland and Waterbirds [A999], Common tern (Sterna hirundo) [A193], Cormorant (Phalacrocorax carbo) [A017]	There is a separation distance of ca. 22.02 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 35.30 km (instream 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 Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
004129	Ballysadare Bay SPA	23.75	Light-bellied Brent Goose (Branta bernicla hrota) [A046], Grey Plover (Pluvialis squatarola) [A141], Wetland and Waterbirds [A999], Bar-tailed Godwit (Limosa lapponica) [A157], Redshank (Tringa totanus) [A162], Dunlin (Calidris alpina) [A149]	There is a separation distance of ca. 23.75 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 36.1 km (instream 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.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				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.		
000622	Ballysadare Bay SAC	23.99	Estuaries [1130], Mudflats and sandflats not covered by seawater at low tide [1140], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Humid dune slacks [2190], Harbour seal (Phoca vitulina) [1365], Narrow-mouthed Whorl Snail (Vertigo angustior) [1014], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Embryonic shifting dunes [2110]	There is a separation distance of ca. 23.99 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 35.93 km (instream 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
000458	Killala Bay Moy Estuary SAC	34.49	Sea lamprey (Petromyzon marinus) [1095], Humid dune slacks [2190], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Salicornia and other annuals colonising mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140], Embryonic shifting dunes [2110], Estuaries [1130], Harbour seal (Phoca vitulina) [1365], Narrow-mouthed whorl snail	There is a separation distance of ca. 34.49 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 68.47 km (instream distance) is present. The LACAP provides for actions which may result in land use change and infrastructure development etc.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			(Vertigo angustior) [1014], Annual vegetation of drift lines [1210], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120]	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.		
004036	Killala Bay Moy Estuary SPA	34.83	Wetland and Waterbirds [A999], Dunlin (Calidris alpina) [A149], Curlew (Numenius arquata) [A160], Ringed Plover (Charadrius hiaticula) [A137], Bar-tailed Godwit (Limosa lapponica) [A157], Golden Plover (Pluvialis apricaria) [A140], Grey Plover (Pluvialis squatarola) [A141], Sanderling (Calidris alba) [A144], Redshank (Tringa totanus) [A162]	There is a separation distance of ca. 34.83 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 70.63 km (instream 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 Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes
000268	Galway Bay Complex SAC	44.82	Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Mediterranean salt meadows (Juncetalia maritimi) [1410], Large shallow inlets and bays	There is a separation distance of ca. 44.82 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 83.23 km (instream distance) is present.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			[1160], Alkaline fens [7230], Perennial vegetation of stony banks [1220], Coastal lagoons [1150], Limestone pavements [8240], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Reefs [1170], Otter (Lutra lutra) [1355], Juniperus communis formations on heaths or calcareous grasslands [5130], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Harbour seal (Phoca vitulina) [1365], Turloughs [3180]	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.		
004031	Inner Galway Bay SPA	45.28	Turnstone (Arenaria interpres) [A169], Ringed Plover (Charadrius hiaticula) [A137], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Dunlin (Calidris alpina) [A149], Sandwich Tern (Sterna sandvicensis) [A191], Wetland and Waterbirds [A999], Black-headed Gull (Chroicocephalus ridibundus) [A179], Black-throated Diver (Gavia arctica) [A002], Common Gull (Larus canus) [A182], Curlew (Numenius arquata) [A160], Golden Plover (Pluvialis apricaria) [A140], Teal (Anas crecca) [A052], Lapwing (Vanellus vanellus) [A142], Common tern (Sterna hirundo) [A193], Cormorant (Phalacrocorax carbo) [A017], Bar-tailed Godwit (Limosa lapponica) [A157], Redshank (Tringa totanus) [A162], Grey Heron (Ardea cinerea) [A028], Wigeon (Anas penelope) [A050], Great Northern Diver (Gavia immer) [A003], Red-breasted Merganser (Mergus serrator) [A069]	There is a separation distance of ca. 45.28 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 83.93 km (instream 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 Special Conservation Interests of this European site as a result of activities proposed under the LACAP.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002165	Lower River Shannon SAC	55.89	Mudflats and sandflats not covered by seawater at low tide [1140], Sea lamprey (Petromyzon marinus) [1095], Salicornia and other annuals colonising mud and sand [1310], Otter (Lutra lutra) [1355], Atlantic salmon (Salmo salar) [1106], Mediterranean salt meadows (Juncetalia maritimi) [1410], Sandbanks which are slightly covered by sea water all the time [1110], Reefs [1170], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Brook lamprey (Lampetra planeri) [1096], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], River lamprey (Lampetra fluviatilis) [1099], Coastal lagoons [1150], Perennial vegetation of stony banks [1220], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Bottlenose dolphin (Tursiops truncatus) [1349], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Estuaries [1130], Large shallow inlets and bays [1160]	There is a separation distance of ca. 55.89 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 75.79 km (instream 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
004077	River Shannon and River Fergus SPA	74.16	Whooper Swan (Cygnus cygnus) [A038], Black-tailed Godwit (Limosa limosa) [A156], Lapwing (Vanellus vanellus) [A142], Knot (Calidris canutus) [A143], Scaup (Aythya marila) [A062], Wigeon (Anas penelope) [A050], Black-headed Gull (Chroicocephalus ridibundus) [A179], Wetland and	There is a separation distance of ca. 74.16 km between this European Site and the area of Roscommon County LACAP and a hydrological connection of 105.56 km (instream distance) is present.	Yes	Yes

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			Waterbirds [A999], Ringed Plover (Charadrius hiaticula) [A137], Redshank (Tringa totanus) [A162], Golden Plover (Pluvialis apricaria) [A140], Curlew (Numenius arquata) [A160], Teal (Anas crecca) [A052], Dunlin (Calidris alpina) [A149], Greenshank (Tringa nebularia) [A164], Pintail (Anas acuta) [A054], Shoveler (Anas clypeata) [A056], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Grey Plover (Pluvialis squatarola) [A141], Cormorant (Phalacrocorax carbo) [A017], Shelduck (Tadorna tadorna) [A048], Bar-tailed Godwit (Limosa lapponica) [A157]	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.		

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 (National CAP) 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 Northern and Western 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 considered through the 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 68 (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 68 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 68 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[6].

4.3 Identifying and Characterising Potential Significant Effects

The following parameters can be used when characterising impacts[7]:

- 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.

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

[7] 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 CO_2 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 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, BET 2[8], BET 3.A[9], BET 3.B[10], BET 6[11], BET 7[12], BET 8[13], BET 9[14], BET 10[15], BET 11[16], NEGI 2[17], etc.

[8] Implement prioritised SEAI Pathfinder projects in RCC including Aras an Chontae, Dillon House Library, Roscommon Leisure Centre, Roscommon Arts Centre and Roscommon Library and progress remaining buildings identified in Energy Audit process, prioritising significant energy users. Progress Public Lighting Energy Efficiency Project in support of energy efficient public lighting. Incorporate additional energy saving measures in consultation with local communities; having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.

[9] Manage energy efficiency and vacancy levels in Local Authority housing stock in accordance with the Housing Strategy and national retrofit programme. Include energy awareness and management information in pre-tenancy training and to existing and prospective tenants as part of retrofits/energy upgrades where applicable; having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.

[10] Promote the development of suitable alternative energy projects in appropriate areas, including on degraded lands in RCC ownership (e.g. historic landfill sites) and particularly those developed and run by communities aligned with the SEC programme and in accordance with the adopted RCC renewable energy strategy (CDP); having due regard to landscape and visual amenity and environmental sensitivities such as biodiversity, noise environment, air environment and European Sites. Where it is confirmed through a glint and glare assessment that any solar development will not have any potential glint and glare impact on sensitive receptors, or otherwise, where it is confirmed that any solar development constitutes exempted development under the Planning and Development Regulations by virtue of its size or location outside a Solar Safeguarding Zone.

[11] Review RCC fleet management and composition in the context of required emissions reductions and in accordance with the Reimagining fleet strategy. Implement changes in line with recommendations. Provide training on fleet operation including emissions reducing measures. Promote fleet sustainability.

[12] Investigate the potential for the extension of the EV and renewable CNG networks and provision of alternatives to the current diesel fuelled HGV fleet. RCC opposes the use of gas from fracked sources in the fuel mix, having due regard to relevant environmental sensitivities and available grid/mains capacity.

[13] Review modal split for staff and Council Activities through the development and implementation of a Workplace Travel Plan in conjunction with NTA Smarter Workplaces. Develop a pilot Mobility Hub project for RCC staff in this regard and apply learning to potential external initiatives; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, sensitive human receptors and traffic and transport conditions.

[14] In line with EV strategy findings and recommendations, facilitate enhanced access to charging infrastructure throughout the County; having due regard to relevant environmental sensitivities and available grid/mains capacity.

[15] Facilitate the prioritised expansion of active travel projects in line with NTA/TFI strategy in high impact urban areas such as Roscommon Town and Athlone. Facilitate the expansion of the local link network in line with the National Transport Investment Framework, Transport for Ireland Strategy and smarter travel initiatives, including advancement of decarbonisation (alternative fuels), physical infrastructure (bus stops, linked cycle and walkways), digital technologies (streamline timetables, payment methods), target dedicated service provision (e.g. education, healthcare, employment, rural) alignment with national, regional and local services and promotion of modal shift. Promote - through control or influence as appropriate - the carrying out of development supported by this action in a manner that has due regard to: relevant environmental sensitivities, including European sites; and opportunities to promote nature-based solutions and Sustainable Drainage Systems.

[16] Implement urban place making initiatives, including the reuse and regeneration of vacant, underused and derelict sites in the urban areas throughout the county in accordance with the CDP, LAPs and emerging Town Centre First policy promoting compact urban growth and vibrancy, facilitating modal shift and creating destination assets to focus benefits of regenerative tourism and protect amenity and heritage assets; having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.

[17] Establish holistic linkages between existing, planned and proposed amenity infrastructure and heritage assets within the county to enhance archaeological protection, biodiversity (wildlife corridors), flood resilience (ecosystem services) and increase public awareness (immersion in nature/heritage), whilst promoting the adoption nature-based solutions and SuDS as appropriate, avoidance of habitat fragmentation, and adherence to environmental protection requirements.

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

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 BET 2[8], BET 3.A[9], BET 7[12], BET 8[13], BET 9[14], BET 10[15], BET 11[16], NEGI 2[17], NEGI 6[18], etc. 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: BET 2[8], BET 3.A[9], BET 6[11], BET 7[12], BET 9[14], BET 10[15], etc.

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.

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. 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 BET 3.B[10], BET 8[13], BET 11[16], NEGI 6[18], NEGI 7[19], and SRM 5[20] (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.

[18] Engage with external stakeholders, including semi-state bodies, communities, NGOs and private developers to realise renewable energy ambitions and agricultural emissions reductions set out at national, regional and local level; 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.

[19] Establish and coordinate links with relevant state departments, semi-state bodies and advisory agencies in support of the development, application and funding of climate action innovations in operations, service delivery and infrastructural provision (including roads programme) at policy/programme development stage and through targeted education and training programmes in the areas of planning, H&S, roads, regeneration and environment; whilst advocating and exerting influence to ensure projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.

[20] Prioritise climate action based interventions in locations when greatest emissions savings can be achieved, such as EV charging in town centres, prioritising reuse of existing built fabric where services and infrastructure are in place, reuse existing paving/building material where possible and in line with relevant specifications; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality.

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: BET 6[11], DZ 5[21], DZ 7[22], DZ 8[23], DZ 9[24], DZ 10[25]. 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 BET 6[11], DZ 7[22], DZ 8[23], DZ 9[24], DZ 10[25]. 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 the LACAP.

[21] Prioritise nature based solutions in the execution of all development within the decarbonisation zone aligned with the National Implementation Strategy for Nature-Based Solutions for the management of rainwater and surface water run-off in urban areas, having due regard to environmental sensitivities such as biodiversity, European sites and water quality.
[22] Target existing and proposed and/or new RCC residential developments to optimise energy efficiencies and carbon emissions reductions, including roll-out of energy management systems and smart meters to council owned social housing. Develop targeted education programmes for new technology users in effective energy management as part of pre-tenancy training in housing - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.
[23] Explore renewable energy heat sources including the installation of heat pumps at existing residential units as well as new developments and the potential of renewable gas and district heating - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.
[24] In addition to statutory requirements, engage with SEAI on a potential retrofitting programme to promote upgrade of existing commercial premises to optimise the energy efficiency of current building stock, create opportunities for use of renewable energy, including the use of heat pumps and renewable alternatives for commercial buildings - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.
[25] RCC will utilise the 'Gap to Target' tool and the Building Pathfinder Programme to support Public Sector building retrofits and potential for renewable energy heat sources should be explored including the use of renewable gas as well as district heating opportunities to reduce energy consumption and carbon emissions at public buildings - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.

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 BET 6[11], BET 7[12], BET 8[13], BET 9[14], BET 10[15], NEGI 2[17], NEGI 3[26], NEGI 7[19], NEGI 10[27], SRM 5[20], etc. Similarly, emissions to air have potential to adversely affect the conservation status of European sites; however, the LACAP contains actions – such as BET 6[11], BET 7[12], BET 8[13], BET 9[14], BET 10[15], NEGI 7[19], SRM 5[20], 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 BET 6[11], BET 7[12], BET 8[13], BET 9[14], BET 10[15], NEGI 2[17], NEGI 7[19], NEGI 10[27], SRM 5[20], etc.

[26] Engage with stakeholders in peatland and forestry management to align with heritage policy and RCC emergency services fire prevention and response provisions. Prepare guidelines for stakeholder use as appropriate. Engage peatland and forestry stakeholders with initiatives and community projects, identify synergies with JTF programme and areas of "added value" for local communities.; 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.

[27] Implement the sustainable management practices for public open spaces report and guidelines in local authority operations and promote education and awareness on the use of herbicides and pesticides to the public and local communities to protect biodiversity and water quality. Highlight danger of invasive species and develop internal and external educational resources on prevention and biodiversity-aware eradication;
-Ensure that the invasive species educational resource is developed by a competent ecology team.
-Ensuring that the educational material regarding herbicides and pesticides promotes use only to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.

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; ; GL 1[28], GL 2[29], BET 1[30], BET 3.B[10], BET 7[12], NEGI 6[18], CTR 1[31], CTR 4[32], SRM 2[33] 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.

[28] Prepare and adopt Roscommon County Climate Action Plan in accordance with obligations and to highlight organisational commitment to low carbon transition. Periodically review actions in line with emerging findings on future climate impacts and new technologies. Ensure that relevant findings at local level are fed upwards into national level policy and decision-making.

[29] Engage with the existing range of community capacity building supports to progress climate action initiatives in a consolidated way. Ensure that stakeholders can engage with support service providers, funding streams and tailored advice to develop, mobilise and deliver projects.

[30] Ensure that all new Local Authority Buildings are designed to meet Net Zero Carbon using new innovative construction techniques, products, and processes. Identify a pilot building project to establish RCC as an exemplar of best practice.

[31] Identify gaps in support for communities in achieving their climate ambition in the areas of place making, economic development and employment generation, agriculture, mobility, tourism and heritage, social enterprise, retail, commerce, industry, waste management and the circular economy and renewable energy development. Engage externally and internally to address these.

[32] Climate action proof community grants administered by Roscommon County Council, promoting projects that can demonstrate improvements in waste minimization, circular economy, energy savings, renewables and behavioural change.

[33] Engage with Teagasc and the agricultural community on the potential for emissions reduction, biodiversity enhancement and environmental pollution prevention through the application of innovative technologies in waste management and renewable energy generation.

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

Site Code	Site Name	Characterisation of Potential Effects
		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.
000216	River Shannon Callows SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, waste management, direct interaction with species and populations through hunting, recreation and other direct land use practices. 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.
000218	Coolcam Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices and mining. 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.
000297	Lough Corrib SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, mining, waste management, and other direct land use practices. 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
000440	Lough Ree SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, waste management, antagonism arising from introduction of species, wildlife watching, direct interaction with species and populations through hunting, recreation and other direct land use practices. 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.
000580	Mongan Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, burning, hydrological interactions, waste management, direct interaction with species and populations through hunting. 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.
000588	Ballinturly Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices and direct interaction with species and populations through hunting. 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.
000592	Bellanagare Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, and waste management. 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
000595	Callow Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, burning, hydrological interactions. 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.
000597	Carrowbehy/Caher Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, and waste management. 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.
000600	Cloonchambers Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, invasive species, hydrological interactions, and waste management. 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.
000604	Derrinea Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, invasive species, hydrological interactions, and waste management. 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
000607	Errit Lough SAC	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. The known threats and pressures for the SAC relate to human intrusions and disturbances. 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.
000609	Lisduff Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, and other human disturbances. 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.
000610	Lough Croan Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices and direct interaction with species and populations through predator control. 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.
000611	Lough Funshinagh SAC	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. The known threats and pressures for the SAC relate to agricultural practices, direct interaction with species and populations through predator control and other direct land use practices. 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
000612	Mullygollan Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, and direct interaction with species and populations through hunting. 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.
000614	Cloonshanville Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, and hydrological interactions. 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.
001571	Urlaur Lakes SAC	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. The known threats and pressures for the SAC relate to agricultural practices, hydrological interactions, waste management, direct interaction with species and populations through fishing, recreation and other direct land use practices. 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.
001625	Castlesampson Esker SAC	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. The known threats and pressures for the SAC relate to agricultural practices and mining. 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
001626	Annaghmore Lough (Roscommon) SAC	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. The known threats and pressures for the SAC relate to agricultural practices and burning. 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.
001637	Four Roads Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices. 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.
001673	Lough Arrow SAC	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. The known threats and pressures for the SAC relate to agricultural practices, invasive species, hydrological interactions, and other direct land use practices. 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.
001776	Pilgrim's Road Esker SAC	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. The known threats and pressures for the SAC relate to agricultural practices, species composition change, waste management, and other direct land use practices. 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
001818	Lough Forbes Complex SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, wildlife watching, direct interaction with species and populations through hunting and recreation. 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.
002110	Corliskea/Trien/Cloonfelliv Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, burning, hydrological interactions. 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.
002214	Killeglan Grassland SAC	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. The known threats and pressures for the SAC relate to agricultural practices, waste management, and other direct land use practices. 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.
002296	Williamstown Turloughs SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, mining, hydrological interactions, waste management, and other direct land use practices. 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
002298	River Moy SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, direct interaction with species and populations through taking and removal of animals, fishing and predator control, recreation, and other direct land use practices. 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.
002338	Drumalough Bog SAC	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. The known threats and pressures for the SAC relate to invasive species, hydrological interactions, and waste management. 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.
002339	Ballynamona Bog and Corkip Lough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, invasive species, hydrological interactions, waste management, recreation and other direct land use practices. 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.
002348	Clooneen Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, hydrological interactions. 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
002349	Corbo Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices and hydrological interactions. 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.
002354	Tullaghanrock Bog SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, and hydrological interactions. 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.
004048	Lough Gara SPA	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. The known threats and pressures for the SAC relate to agricultural practices and forestry. 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.
004050	Lough Arrow SPA	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. The known threats and pressures for the SAC relate to agricultural practices, direct interaction with species and populations through fishing, and recreation. 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.
004064	Lough Ree SPA	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
		The known threats and pressures for the SPA relate to agricultural practices, forestry, invasive species, direct interaction with species and populations through hunting and recreation. 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 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. The known threats and pressures for the SPA relate to agricultural practices, hydrological interactions, direct interaction with species and populations through hunting and fishing, recreation and other direct land use practices. 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.
004097	River Suck Callows SPA	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. The known threats and pressures for the SPA relate to agricultural practices, forestry, direct interaction with species and populations through hunting and fishing, recreation and other direct land use practices. 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.
004101	Ballykenny-Fisherstown Bog SPA	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. The known threats and pressures for the SPA relate to agricultural practices, forestry, direct interaction with species and populations through hunting, and recreation. 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.
004105	Bellanagare Bog SPA	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
		The known threats and pressures for the SPA relate to agricultural practices, forestry, hydrological interactions, and other direct land use practices. 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.
004139	Lough Croan Turlough SPA	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. The known threats and pressures for the SPA relate to agricultural practices. 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.
004140	Four Roads Turlough SPA	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. The known threats and pressures for the SPA relate to agricultural practices. 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.
004017	Mongan Bog SPA	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. The known threats and pressures for the SPA relate to agricultural practices, mining, and improved access to site. 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.
000255	Croaghill Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices and mining. 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
004086	River Little Brosna Callows SPA	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. The known threats and pressures for the SPA relate to agricultural practices, direct interaction with species and populations through fishing and hunting, recreation and other direct land use practices. 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.
000636	Templehouse and Cloonacleigha Loughs SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, succession, and dredging. 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 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. The known threats and pressures for the SPA relate to agricultural practices, mining, burning, direct interaction with species and populations through hunting, and other direct land use practices. 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.
000295	Levally Lough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, mining, and direct interaction with species and populations through hunting. 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
000576	Fin Lough (Offaly) SAC	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. The known threats and pressures for the SAC relate to agricultural practices, burning, hydrological interactions, waste management, direct interaction with species and populations through hunting, biocenotic evolution, and succession. 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.
001656	Bricklieve Mountains & Keishcorran SAC	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. The known threats and pressures for the SAC relate to agricultural practices, burning, direct interaction with species and populations through fishing and hunting, and other direct land use practices. 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.
000584	Cuilcagh - Anierin Uplands SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, burning, problematic native species, hydrological interactions, waste management, taking from nest, missing or wrongly directed conservation measures, recreation and other direct land use practices. 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.
000448	Fortwilliam Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, hydrological interactions, wildlife watching. 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
001899	Cloonakillina Lough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, burning, direct interaction with species and populations through fishing, and recreation. 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.
000296	Lisnageeragh Bog and Ballinastack Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, mining, hydrological interactions, waste management, direct interaction with species and populations through hunting, and other direct land use practices. 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.
000492	Doocastle Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, and direct interaction with species and populations through hunting. 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.
001898	Unshin River SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, and hydrologic interactions. 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
000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	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. The known threats and pressures for the SAC relate to agricultural practices, burning, hydrological interactions, waste management, direct interaction with species and populations through hunting, recreation and other direct land use practices. 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.
000637	Turloughmore (Sligo) SAC	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. The known threats and pressures for the SAC relate to agricultural practices, forestry, biocenotic evolution, succession. 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 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. The known threats and pressures for the SAC relate to agricultural practices, waste management, invasive species, problematic native species, forestry, mining, succession, eutrophication, hydrological interactions, climatic changes, recreation and other direct land use practices. 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 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. The known threats and pressures for the SPA relate to agricultural practices, direct interaction with species and populations through hunting and fishing, and recreation. 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
004129	Ballysadare Bay SPA	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. The known threats and pressures for the SPA relate to agricultural practices, aquaculture, direct interaction with species and populations through hunting, and other direct land use practices. 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.
000622	Ballysadare Bay SAC	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. The known threats and pressures for the SAC relate to agricultural practices, erosion, invasive species, direct interaction with species and populations through fishing, recreation and other direct land use practices. 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.
000458	Killala Bay/Moy Estuary SAC	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. The known threats and pressures for the SAC relate to waste management, hydrological interactions, climatic changes, direct interaction with species and populations through fishing, recreation and other direct land use practices. 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.
004036	Killala Bay/Moy Estuary SPA	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. The known threats and pressures for the SPA relate to agricultural practices, direct interaction with species and populations through fishing, recreation and other direct land use practices. 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
000268	Galway Bay Complex SAC	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. The known threats and pressures for the SAC relate to agricultural practices, aquaculture, direct interaction with species and populations through hunting and fishing, hydrological interactions, invasive species, extraction of natural materials, waste management, recreation and other direct land use practices. 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.
004031	Inner Galway Bay SPA	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. The known threats and pressures for the SPA relate to agricultural practices, aquaculture, direct interaction with species and populations through hunting and fishing, hydrological interactions, waste management, recreation and other direct land use practices. 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.
002165	Lower River Shannon SAC	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. The known threats and pressures for the SAC relate to agricultural practices, aquaculture, forestry, pollutants, eutrophication, invasive species, hydrological interactions, waste management, direct interaction with species and populations through hunting and fishing, recreation, and other direct land use practices. 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
004077	River Shannon and River Fergus Estuaries SPA	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. The known threats and pressures for the SPA relate to agricultural practices, aquaculture, waste management, recreation and other direct land use practices. 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.[34] 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.

[34] 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:
BET 2	Implement prioritised SEAI Pathfinder projects in RCC including Aras an Chontae, Dillon House Library, Roscommon Leisure Centre, Roscommon Arts Centre and Roscommon Library and progress remaining buildings identified in Energy Audit process, prioritising significant energy users. Progress Public Lighting Energy Efficiency Project in support of energy efficient public lighting. Incorporate additional energy saving measures in consultation with local communities	This action will support retrofitting aimed at energy efficiency at the core. The adoption of this action can potentially result in reduced energy consumption and prevent GHG emissions. The action is likely to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. Due regard should be given to Annex IV species which may be roosting in any structures which are to be developed.	Implement prioritised SEAI Pathfinder projects in RCC including Aras an Chontae, Dillon House Library, Roscommon Leisure Centre, Roscommon Arts Centre and Roscommon Library and progress remaining buildings identified in Energy Audit process, prioritising significant energy users. Progress Public Lighting Energy Efficiency Project in support of energy efficient public lighting. Incorporate additional energy saving measures in consultation with local communities; having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.
BET 3.A	Manage energy efficiency and vacancy levels in Local Authority housing stock in accordance with the Housing Strategy and national retrofit programme. Include energy awareness and management information in pre-tenancy training and to existing and prospective tenants as part of retrofits/energy upgrades where applicable	This action has the potential to support the use of derelict structures which could result in significant negative effects if unmitigated. Any use should ensure correct restoration of derelict structures. This action has the potential to have adverse effects on Bats which are Annex IV species, as many roosts are located within old unused buildings. There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated. The adoption of this action can potentially result in reduced energy consumption and prevent GHG emissions.	Manage energy efficiency and vacancy levels in Local Authority housing stock in accordance with the Housing Strategy and national retrofit programme. Include energy awareness and management information in pre-tenancy training and to existing and prospective tenants as part of retrofits/energy upgrades where applicable; having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		The action is likely to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	
BET 3.B	Promote the development of suitable alternative energy projects in appropriate areas, including on degraded lands in RCC ownership (e.g. historic landfill sites) and particularly those developed and run by communities aligned with the SEC programme and in accordance with the adopted RCC renewable energy strategy (CDP)	This action is promotional in nature and will have no real environmental effect when considered in isolation. This action has the potential to have positive environmental effects, particularly to biodiversity, water and air quality. The development of renewable energy infrastructure (e.g. PV panels) has the potential to result in negative effects on biodiversity such as glint and glare impacts on sensitive environmental receptors. There is also the potential for minor air and noise pollution effects from small scale construction associated with this action.	Promote the development of suitable alternative energy projects in appropriate areas, including on degraded lands in RCC ownership (e.g. historic landfill sites) and particularly those developed and run by communities aligned with the SEC programme and in accordance with the adopted RCC renewable energy strategy (CDP); -having due regard to landscape and visual amenity and environmental sensitivities such as biodiversity, noise environment, air environment and European Sites. - Where it is confirmed through a glint and glare assessment that any solar development will not have any potential glint and glare impact on sensitive receptors, or otherwise, where it is confirmed that any solar development constitutes exempted development under the Planning and Development Regulations by virtue of its size or location outside a Solar Safeguarding Zone.
BET 6	Review RCC fleet management and composition in the context of required emissions reductions and in accordance with the Reimagining fleet strategy. Implement changes in line with recommendations.	This action has the potential to promote the use of electrical vehicles or vehicle based on renewable fuels within the RCC fleet. Increasing the level of local authority vehicles that use sustainable sources of energy/fuel will have a slight positive effect on climate.	Review RCC fleet management and composition in the context of required emissions reductions and in accordance with the Reimagining fleet strategy. Implement changes in line with recommendations. Provide training on fleet operation including emissions reducing measures. Promote fleet sustainability.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
	Provide training on fleet operation including emissions reducing measures.	Training has the potential to result in 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 scalable adoption of EVs or renewable fuel-based vehicles may lead to negative life-cycle environmental impacts, such as impacts on land use and land use change and material assets.	
BET 7	Investigate the potential for the extension of the EV and renewable CNG networks and provision of alternatives to the current diesel fuelled HGV fleet. RCC opposes the use of gas from fracked sources in the fuel mix.	This action has the potential to promote the use of electrical vehicles and CNG based vehicles. Increasing the level of vehicles within the LACAP area that use sustainable sources of energy/fuel will have a slight 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. This action has the potential to support the expansion of the EV charging and CNG fuelling networks and has the potential to support the development of infrastructure including grid/mains connection routes across the extent of the local authority's functional area. In the absence of any mitigation, works involved in the construction of this 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), and biodiversity impacts.	Investigate the potential for the extension of the EV and renewable CNG networks and provision of alternatives to the current diesel fuelled HGV fleet. RCC opposes the use of gas from fracked sources in the fuel mix, having due regard to relevant environmental sensitivities and available grid/mains capacity.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
BET 8	Review modal split for staff and Council Activities through the development and implementation of a Workplace Travel Plan in conjunction with NTA Smarter Workplaces. Develop a pilot Mobility Hub project for RCC staff in this regard and apply learning to potential external initiatives.	The development of a transport mobility hub has the potential to encourage modal shift, leading to a reduction in vehicle related GHG emissions and, to a degree, potentially local air quality improvements. The development of infrastructure associated with a transport mobility hub may result in negative construction related environmental effects, including effects on water quality, Biodiversity, European sites and local noise, dust and traffic related effects.	Review modal split for staff and Council Activities through the development and implementation of a Workplace Travel Plan in conjunction with NTA Smarter Workplaces. Develop a pilot Mobility Hub project for RCC staff in this regard and apply learning to potential external initiatives; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, sensitive human receptors and traffic and transport conditions.
BET 9	In line with EV strategy findings and recommendations, facilitate enhanced access to charging infrastructure throughout the County	This action has the potential to promote the use of electrical vehicles and compressed natural gas. Increasing the level of vehicles within the LACAP area that use sustainable sources of energy/fuel will have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. This action has the potential to support the expansion of the EV charging network will lead to the development of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the local authority's functional area. 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.	In line with EV strategy findings and recommendations, facilitate enhanced access to charging infrastructure throughout the County; having due regard to relevant environmental sensitivities and available grid/mains capacity.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
BET 10	Facilitate the prioritised expansion of active travel projects in line with NTA/TFI strategy in high impact urban areas such as Roscommon Town and Athlone. Facilitate the expansion of the local link network in line with the National Transport Investment Framework, Transport for Ireland Strategy and smarter travel initiatives, including advancement of decarbonisation (alternative fuels), physical infrastructure (bus stops, linked cycle and walkways), digital technologies (streamline timetables, payment methods), target dedicated service provision (e.g. education, healthcare, employment, rural) alignment with national, regional and local services and promotion of modal shift	This action will support the adoption of active travel projects. In the absence of any mitigation, works involved in the construction of active travel and sustainable transport 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 active travel and sustainable transport 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. The 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.	Facilitate the prioritised expansion of active travel projects in line with NTA/TFI strategy in high impact urban areas such as Roscommon Town and Athlone. Facilitate the expansion of the local link network in line with the National Transport Investment Framework, Transport for Ireland Strategy and smarter travel initiatives, including advancement of decarbonisation (alternative fuels), physical infrastructure (bus stops, linked cycle and walkways), digital technologies (streamline timetables, payment methods), target dedicated service provision (e.g. education, healthcare, employment, rural) alignment with national, regional and local services and promotion of modal shift. Promote - through control or influence as appropriate - the carrying out of development supported by this action in a manner that has due regard to: relevant environmental sensitivities, including European sites; and opportunities to promote nature-based solutions and Sustainable Drainage Systems.
BET 11	Implement urban place making initiatives, including the reuse and regeneration of vacant, underused and derelict sites in the urban areas throughout the county in accordance with the CDP, LAPs and emerging Town Centre First policy promoting compact urban growth and vibrancy, facilitating modal shift and creating destination assets to focus benefits of	This action will support regenerative action in the community. The action is likely to have a slight positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. This action has the potential to support the use of derelict structures which could result in significant negative effects if unmitigated. Any use should ensure correct restoration of derelict structures.	Implement urban place making initiatives, including the reuse and regeneration of vacant, underused and derelict sites in the urban areas throughout the county in accordance with the CDP, LAPs and emerging Town Centre First policy promoting compact urban growth and vibrancy, facilitating modal shift and creating destination assets to focus benefits of regenerative tourism and protect amenity and heritage assets; having due regard to protected species, biodiversity, European sites and the need to appropriately conserve protected structures.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
	regenerative tourism and protect amenity and heritage assets.	This action has the potential to have adverse effects on Bats which are Annex IV species, as many roosts are located within old unused buildings. This action has the potential to have significant positive effects on population, land use and tourism. There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negatively affect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.	
NEGI 2	Establish holistic linkages between existing, planned and proposed amenity infrastructure and heritage assets within the county to enhance archaeological protection, biodiversity (wildlife corridors), flood resilience (ecosystem services) and increase public awareness (immersion in nature/heritage)	This action has the potential to have positive impacts on biodiversity, environment and heritage. The progression of minor flood resilience related actions has the potential to lead to minor development taking place at and in the vicinity of water bodies. Works potentially supported by this action have the potential to have an adverse effect on the water environment and biodiversity, including flora and fauna. This action will promote good flood risk management and flood risk reduction. Proper SuDS maintenance will generate a positive effect for environmental receptors that are at risk of being negatively impacted by flood events - by reducing the risk of such flood events. This action has the potential to promote the protection of vulnerable receptors from climate change risks - such as a climate change influenced flooding - and has the potential to generate a significant positive effect for such receptors (e.g. important habitat, built heritage, protected sites, sensitive human receptors).	Establish holistic linkages between existing, planned and proposed amenity infrastructure and heritage assets within the county to enhance archaeological protection, biodiversity (wildlife corridors), flood resilience (ecosystem services) and increase public awareness (immersion in nature/heritage), whilst promoting the adoption nature-based solutions and SuDS as appropriate, avoidance of habitat fragmentation, and adherence to environmental protection requirements.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
NEGI 3	Engage with stakeholders in peatland and forestry management to align with heritage policy and RCC emergency services fire prevention and response provisions. Prepare guidelines for stakeholder use as appropriate. Engage peatland and forestry stakeholders with initiatives and community projects, identify synergies with JTF programme and areas of "added value" for local communities.	This action will have a moderate to significant positive effect on the protection of peatlands and forestry from negative impacts associated with burning. Community projects and initiatives, if not appropriately designed or implemented, have the potential to have unintended adverse environmental effects, including effects on water quality and hydrology, biodiversity, European sites, and the soils environment land use.	Engage with stakeholders in peatland and forestry management to align with heritage policy and RCC emergency services fire prevention and response provisions. Prepare guidelines for stakeholder use as appropriate. Engage peatland and forestry stakeholders with initiatives and community projects, identify synergies with JTF programme and areas of "added value" for local communities.; 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.
NEGI 6	Engage with external stakeholders, including semi-state bodies, communities, NGOs and private developers to realise renewable energy ambitions and agricultural emissions reductions set out at national, regional and local level	This engagement action will underpin and support the effective delivery of climate action. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community. This action promotes the development of renewable energy infrastructure and associated ancillary infrastructure, including linear development. This action can potentially lead to positive climate effects. The supporting of such developments could however result in a variety of slight to very significant negative environmental effects, including impacts on important habitats and species (due to collision risk and vibration effects), including European sites - thus further consideration and mitigation measures are required.	Engage with external stakeholders, including semi-state bodies, communities, NGOs and private developers to realise renewable energy ambitions and agricultural emissions reductions set out at national, regional and local level; 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:
NEGI 7	Establish and coordinate links with relevant state departments, semi-state bodies and advisory agencies in support of the development, application and funding of climate action innovations in operations, service delivery and infrastructural provision (including roads programme) at policy/programme development stage and through targeted education and training programmes in the areas of planning, H&S, roads, regeneration and environment.	This action is financial/ administrative in nature and will have no real environmental effect when considered in isolation. This action supports some degree of infrastructure construction. In the absence of any mitigation, such large-scale infrastructural projects have the potential to generate a wide variety of negative environmental effects - that range from slight in magnitude to profound - on, inter alia, ecological receptors, the soils and geological environment and the water environment. This action will underpin and support the effective delivery of climate action. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	Establish and coordinate links with relevant state departments, semi-state bodies and advisory agencies in support of the development, application and funding of climate action innovations in operations, service delivery and infrastructural provision (including roads programme) at policy/programme development stage and through targeted education and training programmes in the areas of planning, H&S, roads, regeneration and environment; whilst advocating and exerting influence to ensure projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.
NEGI 8	Implement the tree management strategy to promote enhanced canopy cover within the County including tree protection measures and planting programmes in Local Authority property. Roll out internal training programmes for relevant council staff and contractors and externally for communities, landowners and potential developers on appropriate planting and maintenance for canopy preservation and biodiversity enhancement. Investigate potential system to monitor planting regimes.	This action has the potential to have wide ranging slight to moderate significant effects on local biodiversity, and slight to significant effects on landscape character and visual amenity. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions. The planting of non-native/ invasive trees may negatively impact biodiversity.	Implement the tree management strategy to promote enhanced canopy cover, with a focus on native trees, within the County including tree protection measures and planting programmes in Local Authority property. Roll out internal training programmes for relevant council staff and contractors and externally for communities, landowners and potential developers on appropriate planting and maintenance for canopy preservation and biodiversity enhancement. Investigate potential system to monitor planting regimes.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
NEGI 10	Implement the sustainable management practices for public open spaces report and guidelines in local authority operations and promote education and awareness on the use of herbicides and pesticides to the public and local communities to protect biodiversity and water quality. Highlight danger of invasive species and develop internal and external educational resources on prevention and biodiversity-aware eradication.	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. Inappropriate or improper invasive species management could lead to negative environmental impacts on biodiversity.	Implement the sustainable management practices for public open spaces report and guidelines in local authority operations and promote education and awareness on the use of herbicides and pesticides to the public and local communities to protect biodiversity and water quality. Highlight danger of invasive species and develop internal and external educational resources on prevention and biodiversity-aware eradication; -Ensure that the invasive species educational resource is developed by a competent ecology team. -Ensuring that the educational material regarding herbicides and pesticides promotes use only to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.
SRM 5	Prioritise climate action based interventions in locations when greatest emissions savings can be achieved, such as EV charging in town centres, prioritising reuse of existing built fabric where services and infrastructure are in place, reuse existing paving/building material where possible and in line with relevant specifications.	The reuse of existing paving/building material will promote effective waste management and waste/material circularity. Any measures that improve resource efficiency/circularity will broadly support the reduction of lifecycle GHG emissions associated with the production of materials and goods. This is likely to result in a positive environmental effect generally. This action supports the development of EV charging points and ancillary electrical infrastructure including grid connection routes across the extent of the local authority's functional area.	Prioritise climate action based interventions in locations when greatest emissions savings can be achieved, such as EV charging in town centres, prioritising reuse of existing built fabric where services and infrastructure are in place, reuse existing paving/building material where possible and in line with relevant specifications; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		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.	
DZ 5	Prioritise nature based solutions in the execution of all development within the decarbonisation zone aligned with the National Implementation Strategy for Nature-Based Solutions for the management of rainwater and surface water run-off in urban areas.	Flood resilience action has the potential to have positive environmental effects. The 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 progression of flood resilience related action has the potential to lead to 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	Prioritise nature based solutions in the execution of all development within the decarbonisation zone aligned with the National Implementation Strategy for Nature-Based Solutions for the management of rainwater and surface water run-off in urban areas, having due regard to environmental sensitivities such as biodiversity, European sites and water quality.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		flora and fauna reliant on aquatic eco-systems; and the receiving air environment (due to the generation of construction dust).	
DZ 6	Implement the provisions of the Tree Management Strategy in all RCC functional areas within the DZ to promote canopy health and expansion and enhance ecosystem services and biodiversity.	This action will promote the protection and enhancement of trees and has the potential to generate slight to significant effects on biodiversity in the county. The enhancement of trees may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	Implement the provisions of the Tree Management Strategy, with a focus on native trees, in all RCC functional areas within the DZ to promote canopy health and expansion and enhance ecosystem services and biodiversity.
DZ 7	Target existing and proposed and/or new RCC residential developments to optimise energy efficiencies and carbon emissions reductions, including roll-out of energy management systems and smart meters to council owned social housing. Develop targeted education programmes for new technology users in effective energy management as part of pre-tenancy training in housing	This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.	Target existing and proposed and/or new RCC residential developments to optimise energy efficiencies and carbon emissions reductions, including roll-out of energy management systems and smart meters to council owned social housing. Develop targeted education programmes for new technology users in effective energy management as part of pre-tenancy training in housing - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.
DZ 8	Explore renewable energy heat sources including the installation of heat pumps at existing residential units as well as new developments and the potential of renewable gas and district heating	The action has the potential to provide access to climate action initiatives to all within the community - which could lead to a positive impact on the climate environment and a general lowering of GHG emissions in the LA Region. This action has the potential to support the development of renewable energy development and building retrofits in the LA region that could have a variety of slight to	Explore renewable energy heat sources including the installation of heat pumps at existing residential units as well as new developments and the potential of renewable gas and district heating - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		potentially significant negative environmental effects, including biodiversity impacts.	
DZ 9	In addition to statutory requirements, engage with SEAI on a potential retrofitting programme to promote upgrade of existing commercial premises to optimise the energy efficiency of current building stock, create opportunities for use of renewable energy, including the use of heat pumps and renewable alternatives for commercial buildings	The action has the potential to provide access to climate action initiatives to all within the community - which could lead to a positive impact on the climate environment and a general lowering of GHG emissions in the LA Region. This action has the potential to support the development of renewable energy development and building retrofits in the LA region that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts.	In addition to statutory requirements, engage with SEAI on a potential retrofitting programme to promote upgrade of existing commercial premises to optimise the energy efficiency of current building stock, create opportunities for use of renewable energy, including the use of heat pumps and renewable alternatives for commercial buildings - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.
DZ 10	RCC will utilise the 'Gap to Target' tool and the Building Pathfinder Programme to support Public Sector building retrofits and potential for renewable energy heat sources should be explored including the use of renewable gas as well as district heating opportunities to reduce energy consumption and carbon emissions at public buildings.	The action has the potential to provide access to climate action initiatives to all within the community - which could lead to a positive impact on the climate environment and a general lowering of GHG emissions in the LA Region. This action has the potential to support the development of renewable energy development and building retrofits in the LA region that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts.	RCC will utilise the 'Gap to Target' tool and the Building Pathfinder Programme to support Public Sector building retrofits and potential for renewable energy heat sources should be explored including the use of renewable gas as well as district heating opportunities to reduce energy consumption and carbon emissions at public buildings - having due regard to environmental sensitivities such as European Sites and biodiversity related sensitivities, sensitive human receptors and the need appropriately protected and conserve heritage features.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
DZ 11	Engage with owners/occupiers to enhance awareness to develop appropriate knowledge and skills required to enable energy efficiency improvements in heritage buildings, including specialists to help understand, specify and install appropriate retrofitting to reduce carbon footprint while retaining architectural and heritage integrity. Roll out tailored education scheme in this regard and engage with national funding streams for implementation.	This action has the potential to support carrying out retrofitting/upgrade works at historic structures and traditional buildings which could result in significant negative effects if unmitigated. There is adverse effects on Bats which are Annex IV species, as many roosts are located within old unused buildings. There is also potential for light and air pollution during retrofitting works.	Engage with owners/occupiers to enhance awareness to develop appropriate knowledge and skills required to enable energy efficiency improvements in heritage buildings, including specialists to help understand, specify and install appropriate retrofitting to reduce carbon footprint while retaining architectural and heritage integrity. Roll out tailored education scheme in this regard and engage with national funding streams for implementation, whilst promoting consideration of environmental protection requirements during such works.
DZ 12	Engage with the planning, roads, Town Regeneration, Economic Development & Tourism and Capital Implementation Teams of RCC in the development, design and funding of town centre projects to reduce the need to travel in the urban area and to promote availability and uptake of public transport in support of a pedestrian-focussed town centre. Implement the design manual for Urban Roads and Streets in support of pedestrian priority zones and reduction of vehicular dominance in the town centre and residential areas.	This action has the potential to encourage modal shift and the use of active travel networks and public transport. This action supports the development of additional walkway infrastructure. In the absence of any mitigation, works involved in the construction of additional walkway infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts. This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.	Engage with the planning, roads, Town Regeneration, Economic Development & Tourism and Capital Implementation Teams of RCC in the development, design and funding of town centre projects to reduce the need to travel in the urban area and to promote availability and uptake of public transport in support of a pedestrian-focussed town centre. Implement the design manual for Urban Roads and Streets in support of pedestrian priority zones and reduction of vehicular dominance in the town centre and residential areas. Promote the carrying out of development supported by this action in a manner that has due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality.

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
DZ 14	RCC will examine investment in electric vehicles (EVs), the potential for increased charging facilities and optimum location for these in association with local businesses and communities	This action will support the local authority in reducing its transport sector GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality. This action could also lead to the delivery of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the LA. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including 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.	RCC will examine investment in electric vehicles (EVs), the potential for increased charging facilities and optimum location for these in association with local businesses and communities, having due regard to environmental sensitivities such as heritage, biodiversity, European sites, sensitive human receptors, and available grid capacity.

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

6. CONCLUSION

Stage 1 AA Screening and Stage 2 AA of the Roscommon 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 Roscommon 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[35]. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated.

[35] 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.

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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
000255	Croaghill Turlough SAC	The site is one of the wettest peat-filled turloughs known but it also illustrates many fine wet-dry zonations because of the topography it has a long flooding period. It includes a small area of wet annual vegetation including Rorippa islandica as a specialist rare species. It has a long flooding period.	Croaghill Turlough occupies a very undulating basin so that when it dries out it breaks up into a series of semi-permanent pools with intervening mounds or ridges. The vegetation is correspondingly diverse: most is based on peat and the large area of Persicaria amphibia is noteworthy. The site appears eutrophic. There is no marl (CaCo3) deposition.
000296	Lisnageeragh Bog and Ballinastack Turlough SAC	Lisnageeragh Bog and Ballinastack Turlough SAC is a large composite site which contains good examples of the priority Annex 1 habitats Active Raised Bog and Turlough along with the non-priority habitats Degraded Raised Bog and Depressions on peat substrates of the Rhynchosporion. Raised bog is a rare habitat in the EU and one that is becoming increasingly scarce and under threat in Ireland. 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. The bog is one of the most extensive remaining in east Galway and the quality of the habitat is generally good despite a long history of drainage and peat-cutting. The site already supports a significant area of high quality raised bog microhabitats. Although the turlough area is rather small it is unusual in that it lies adjacent to a raised bog which requires very different hydrological conditions to develop. This makes the transition between the two ecosystems extremely rare and of high ecological value.	Lisnageeragh Bog and Ballinastack Turlough SAC consists of 2 raised bogs and a small turlough situated about 3 km north-east of Glenamaddy in Co. Galway. The raised bogs include the main area Lisnageeragh Bog and cutover which covers approximately 383.5 ha and the smaller area c.0.9km to the east which comprises 4.27 ha and is within Keeloges Bog NHA (000281). Ballinastack Turlough lies at the north-west end of Lisnageeragh Bog and covers approximately 23.7 ha. The site includes almost 273 ha of uncut raised bog and approximately 114.77 ha of cutover bog. The remaining 48.3 ha of the SAC includes wet and dry grassland and conifer plantations developed on the bog margins. The bedrock geology of the site is carboniferous limestone. Lisnageeragh Bog is a good example of a Western raised bog that forms an irregular plateau blanketing low drumlin hills and hollows. The SAC section of Keeloges Bog NHA consists of 3.4 ha of high bog and 0.85 ha of cutover in Ballyhard townland which has been restored as part of an EU LIFE project (2011-15). This area was afforested with conifers in 1969 and was recently clear-felled and the drains blocked in an effort to restore raised bog vegetation as part of this EU project. Lisnageeragh Bog was also part of EU Cohesion Fund restoration project (in the 1990s) in the form of drain blocking on the high bog and another Coillte EU LIFE (2004-08) funded project which included the felling of mature conifer plantations both on the high bog and cutover.

Site Code	Site Name	Quality of Site	Other Site Characteristics
			This project was successful in restoring Active Raised Bog (ARB) supporting conditions on the high bog and restoring transitional areas between the high bog and adjacent mineral soils. Ballinastack Turlough occupies a depression and merges with the raised bog and cutover to the east and south and agricultural fields to the north and west. The soils of the turlough are peaty and the vegetation is sedge dominated. Lisnageeragh Bog is one of the most extensive raised bogs remaining in east Galway. It is relatively intact with 61% of the original bog still present but the quality of the habitat has been severely impacted by a long history of drainage and peat-cutting which continues at this site. The area of Active Raised Bog on this site has expanded by 16.6 ha between 1994 and 2012 due to the two EU funded restoration projects which blocked drains and felled conifer plantations on the bog. The wettest areas on the bog have well developed hummock/hollow/pool systems with bog moss Sphagnum species cover of up to 90% and inter-connecting pools covering over 25% of the bog surface. The presence of a number of flushes some of which are dominated by Purple Moor-grass (Molinia caerulea) adds to the overall habitat diversity of the high bog. Associated with the bog and to the north-east is an area of wet grassland on heavy clay soil which grades into abandoned and regenerating cutover bog. This area is wet and rich in bog mosses. There is also an extensive area of cutover bog in the south-west comprising a mixture of dry banks dominated by Heather and wet pools. Ballinastack Turlough whose winter floodwaters lap at the edge of the raised bog and cutover has a vegetation dominated by Common Sedge (Carex nigra). The natural transition between Ballinastack turlough and the bog has been altered to some extent by historic turf-cutting and agricultural land use. There is a well-defined zonation of the vegetation which relates to the depth and duration of flooding plus soil type and management.

Site Code	Site Name	Quality of Site	Other Site Characteristics
			It extends downwards from cutover raised bog through lightly grazed Purple Moor-grass and rush (Juncus spp.) dominated grassland on peat to a less grazed tall Common Sedge wet fen and swamp species dominated vegetation on more calcareous peat and finally a more grazed grassy and herb rich sward on silty peat which leads down to the swallow holes which drain the turlough. The sandy silty soils in the north west are more heavily used for agriculture and where not fertilised have the usual grass/sedge and herb rich sward typical of the upper edges of turloughs. The co-occurrence of turlough and raised bog is a very rare phenomenon and the maintenance/restoration of transitions between these two priority habitats is of high conservation significance. Site specific conservation objectives have been developed for Lisnageeragh Bog for Active Raised Bog habitat to help meet the national conservation objectives for raised bogs. One of the key objectives of the plan is to restore the area of Active Raised Bog to 58.8ha. There is also long-term potential for 2.6 ha of bog peat-forming habitats (BPFH) to develop if restoration measures are undertaken on cutover areas. Such detailed objectives have yet to be developed for the Keeloges Bog subsite of the SAC but will be produced as part of the restoration plan for the Keeloges Bog NHA site. Current information suggests that while raised bog vegetation will be restored to some of the site the current area restored is too small to support Active Raised Bog. The drain blocking on the high bog and cutover will reduce the impact of drainage on the ecology of this section of Keeloges Bog and may in the long term help support the eventual restoration of some of the Degraded Raised Bog on the open high bog in the NHA to Active Raised Bog. The SAC section of Keeloges 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. An After LIFE management plan is being developed by Coillte for the future conservation management of that part of the SAC.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000492	Doocastle Turlough SAC	This site is the best developed of the three most northerly turloughs in the country with a good diversity of vegetation and several plants uncommon in the locality. There is some nutrient-poor fen with Galium uliginosum - its only station in east Mayo. No arterial or other drainage has been carried out. The bird population is relatively large also.	Doocastle Turlough occupies a shallow basin in rolling drift-covered lowlands. Its base retains some water in summer in a series of pools and ditches but it is predominantly grass-covered and closely grazed. A central rise is flooded less often and has more oligotrophic vegetation than elsewhere. The eastern end includes a castle on an elevated site.
000581	Moyclare Bog SAC	Moyclare Bog is a small raised bog site which contains examples of the Annex I habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). Much of the bog surface is wet and has a moderate to high cover of Sphagnum moss. It supports Rhynchospora fusca a relatively rare species. Perhaps the most striking feature of this bog is the high proportion of active raised bog within the uncut dome (c.60%). The site occurs in close proximity to a number of important raised bogs close to the flood-plain of the River Shannon.	The site is underlain by low permeability Waulsortian Carboniferous limestones. The subsoil geology is dominated by silty/stoney till. Sections to the north indicate that shell marl underlies the peat in places. Most of the raised bogs in the vicinity have been cut away by Bord na Móna over the past 50 years. Part of the cutaway bog has been converted to improved grassland but is included in the site for hydrological reasons.
000584	Cuilcagh - Anierin Uplands SAC	One of the more extensive areas of intact montane blanket bog in Ireland with exceptionally well developed vegetation cover in flat plateau areas including dystrophic lakes hummock and hollow complexes and large areas of wet heath and to a lesser extent dry heath. Inland cliffs support a range of locally rare mountain plants. The site is an important breeding area for several upland birds.	An extensive area of upland composed of Yoredale shales and Carboniferous Sandstones straddling the international boundary with Northern Ireland and covered with montane blanket bog wet heath humid grassland with some small oligotrophic lakes and numerous headstreams and flushes. Inland cliffs of shales occur at the higher elevations and include important fossil remains notably goniatites.
000600	Cloonchambers Bog SAC	This is a large and important western raised bog site which contains areas of active raised bog degraded raised bog and calcareous fen. The presence of an extensive flushed fen area on the high bog surface is a very rare feature of Irish raised bogs and is thus of considerable ecological and ecohydrological interest.	It is thought that this site is underlain by low permeability clayey Carboniferous limestones. The subsoils are dominated by stony till in a silty matrix. The site has a complex sub-surface morphology with the raised bog having grown out of three separate lake basins. An area of base-rich fen vegetation has developed in one area where the peat depth is relatively shallow and there is upwelling of groundwater.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Of particular botanical interest is the presence of Vaccinium vitis-idaea a scarce plant species usually associated with montane heath habitats in the west of Ireland.	Some of the marginal areas of cutover have been converted to semi-improved grassland but are included in the site for hydrological reasons.
000610	Lough Croan Turlough SAC	The site is a diverse wetland with fen reedswamp and turlough communities in juxtaposition. While it all floods at times it seems drier now than it would naturally be. It still contains a large flora which includes Rorippa islandica - a turlough speciality. The wintering waterfowl numbers are moderate and the site is especially useful to dabbling duck. Also has breeding wildfowl including Anas clybeata and Aythya-ferina both Red Data Book species.	Loagh Croan lies in a flattish area of glacial till without limestone outcrops. It is split into two main parts - the east functions as a typical turlough with a wet reedy centre. The west is a fen floating in places which also floods in winter. In between there is undulating ground. Both basins retain some water all year round but there is little overground inflow. The vegetation is eutrophic for the most part.
000611	Lough Funshinagh SAC	The site is most unusual for its size and intermittent drying and provides a waterfowl breeding area of exceptional quality. It is relatively unaffected by drainage and intensive agriculture so its vegetation structure is very interesting. It contains rare species of bird and plant and probably also of invertebrates. Formerly had the largest known population of Podiceps Nigricollis in the country a few pairs may still nest.	Lough Funshinagh is classified as a turlough since it fluctuates to a significant extent every year and occasionally dries out entirely. However in most years an extensive area of reed-filled water persists which provides excellent cover for wildfowl especially breeding species. The lake is fed by springs and a small catchment to the west. It is mesotrophic in quality with some marl (CaCo3) deposition and is surrounded by pastures.
000637	Turloughmore (Sligo) SAC	The habitat is rather uniform though the vegetation that is there is well developed and not currently overgrazed. The importance of the site stems largely from its northerly location and the sand content of the soil which is fairly unusual. There is little if any precipitation of calcium carbonate.	A turlough basin bordered by pasture and cutover bog. The outlines are smoothed by glacial drift with a small outcrop of the bedrock at the eastern end. The floor is flat with a number of depressions which may take water movement. Much of the upper vegetation has a heathy character reflecting the proportion of sand in the local drift.
001673	Lough Arrow SAC	This is a good example of a fairly large naturally mesotrophic lake which has changed little in the last 40 years. Although supplied by groundwater in a limestone area it is not a marl lake like others in the region. Its aquatic vegetation is diverse. Has a Red Data chara species.	A large limestone lake sheltered on three sides by hills. Has a small catchment (6255 ha) and is fed largely by springs on lake bed. Average depth is 9m and maximum 33m. Nutritional status is mesotrophic.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Has some nationally important winter bird populations. Good fish stocks including Salmo trutta and Anguilla anguilla.	In most years the water stratifies Charophyte algae are widespread with seven Chara species identified. Well-developed marginal vegetation occurs especially at north end.
001776	Pilgrim's Road Esker SAC	The importance of the site lies in the relatively large area of high quality species-rich calcareous grassland that occurs. This grassland supports a suite of orchid species including Orchis morio of which this site holds probably the largest population of the species in the country. The occurrence of woodland on the site is notable; esker woodland is becoming increasingly rare in Ireland.	The site comprises an impressive steep-sided esker ridge which is composed of glacial sands and gravels and situated on the north side of Mongan raised bog and to the east of the River Shannon. Species-rich calcareous grassland is the dominant vegetation of the site; areas of Corylus avellana/Fraxinus excelsior woodland scrub improved grassland and gravel pit are also included in the site.
001898	Unshin River SAC	The Unshin River is an excellent example of a pristine unmanaged undrained lowland limestone river and is extremely important as it represents one of only four remaining undrained limestone rivers in Ireland. Such rivers as this are otherwise almost unknown in Europe. It is unpolluted for almost its entire length and supports a species-rich diverse aquatic flora several important bird species fish and several rare riverbank plant species including Poa palustris. Of particular importance is the population of Salmo salar. The site is used by Lutra lutra. A good diversity of adjacent habitats is found along its length including alluvial woodland.	The Unshin River has a spring-fed lake Lough Arrow as its source and flows north-westwards for some 24 km to reach the sea at Ballysadare Bay. The river supports a rich aquatic and emergent flora and runs beside or through a wide variety of habitats. The site also includes the Ballysadare and Owenboy/Owenbeg rivers. The whole site is underlain by Carboniferous limestone.
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.	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

Site Code	Site Name	Quality of Site	Other Site Characteristics
		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.	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.
002199	Ballygar (Aghrane) Bog SAC	The Active Raised Bog (ARB) habitat in Ballygar (Aghrane) Bog SAC is of considerable conservation significance as it is a priority habitat in the EU and one that is scarce and under threat in Ireland. Despite the small areas of Active (7110) and Degraded (7120) Raised Bog habitats present the restoration actions undertaken with EU LIFE funding have resulted in active redevelopment of the habitat with regenerating raised bog microhabitats including hollows and wet flats which is adding to the diversity and scientific value of the site. It supports a good range of bog mosses characteristic of Active Raised Bog including Sphagnum fuscum and S. austinii (both species are characteristic of intact Irish raised bogs; recently it has been determined that most S. fuscum is likely to be S. beothuk). Ballygar bog has not been burnt in over ten years and as a result of this it supports a good range of lichens. The site is being actively managed for conservation as part of the Coillte EU LIFE Project. There are few significant threats to the high bog. The SAC is located along the north-western margins of the raised bog Ballygar Bog NHA (00299) and is considered to constitute supporting habitat for the adjacent areas of Active and Degraded Raised Bog habitat in the NHA. It is estimated that restoration works carried out on this site will benefit the conservation of 2.5 ha of high quality Active Raised Bog and 0.5 ha of Degraded Raised Bog in the adjacent Ballygar Bog NHA (000299). Ireland has a high proportion of the total EU	The raised bog SAC at Ballygar (Aghrane) Bog (002199) consists of 27.98 ha of high bog and cutover bog which occupy the north-west corner of Ballygar Bog NHA (000299). Most of the SAC was until recently covered by coniferous plantation forestry which was planted in 1973-75 and covered 95% of the site. The plantation was clear-felled by 2012 and the intensive drainage system associated with the plantation blocked in 2013 as part of an EU funded LIFE project so as to raise the water table and maintain and restore Active Raised Bog (7110) (ARB) on the site. A wide variety of vegetation/habitat types occur within the site. The main ones are open high bog at the east of the site which includes a small area (0.37ha) of Active Raised Bog recently cleared forestry on high bog which now includes 1.75 ha of Degraded Raised Bog 7120 (DRB) recently cleared plantation on cutover bog and an area of lagg-type woodland (0.79 ha). This lagg woodland consists of a band of mixed woodland dominated by Downy birch (Betula pubescens) and Alder (Alnus glutinosa) with Lodgepole Pine (Pinus contorta) and occurs along the northern margin of the site. Wet lagg woodland development in the marginal areas of raised bogs is a very rare occurrence in Ireland. Another smaller (0.23ha) section of Wet Birch woodland is developing along the very north section of the site. The site is bordered by open high bog on its eastern and south-eastern margins by forestry on cutover bog on its northern margin and by agricultural grassland on its western and south-western side.

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		resource of this habitat type (over 50%) and so has a special responsibility for its conservation at an international level.	Young trees of Lodgepole Pine are encroaching onto the adjacent high bog to the southeast and east of the site through the germination and establishment of windblown seeds from the former plantation.
002213	Glenloughaun Esker SAC	Although small in area this is an excellent example of dry calcareous grassland which is largely unimproved. Of particular note is the species diversity. The orchid interest lies in the occurrence of a large population of Orchis morio a Red Data Book plant species. Orchis mascula also occurs.	This small site is situated on an esker ridge approximately 5 km south-west of Ballinasloe in Co. Galway. It comprises mostly unimproved dry grassland. A feature of the site is the somewhat unusual mixture of calcicole and calcifuge species. Leaching of the base-rich substrate of the esker is likely to have given rise to soil conditions suitable for colonisation by calcifuge species. Some scrub and hedgerows are also present within site along with a small area of deciduous woodland. Main landuse is grazing.
002298	River Moy SAC	This extensive site contains good examples of the Annex 1 habitats active raised bog degraded raised bog Rhynchosporion vegetation alkaline fen alluvial woodland and old oak woodlands. The raised bog areas present constitute the most north-westerly examples of raised bog in Ireland with the most important examples occurring at Derrynabrock and Tawnaghbeg. Alkaline fen is particularly well developed at Mannin and Island Lakes an excellent example of old oak woodland is to be found just east of Pontoon along the shores of Loughs Conn and Cullin. This represents one of the largest stands of oak woodland in western Ireland. Water quality of the river channels is generally good and the majority is classified as unpolluted. The open waters of Loughs Conn and Cullin are moderately hard with relatively low colour and good transparency. Lough Conn with a surface of 50km2 is classified as a mesotrophic system while Lough Cullin (surface of 11 km2) is classified as an oligotrophic system.	This site comprises almost the entire freshwater element of the Moy and its tributaries including both Lough Conn and Lough Cullin. The system drains a catchment area of 805 km2. Most of the site is in Co. Mayo though parts are in west Sligo and north Roscommon. The underlying geology is Carboniferous Limestone for the most part though Carboniferous Sandstone is present at the extreme west of the site with Dalradian Quartzites and schists at the south west. The river and its various tributaries rise in a number of locations some of which are upland areas dominated by blanket bog and heath. Throughout most of its course however the river flows through low-lying countryside where most of the adjoining land consists of agricultural grassland. The river eventually reaches the sea at Ballina where it flows into Killala Bay. To the west of Lough Cullin the river passes through areas where the bedrock is dominated by silicious rocks such as granite and here the character of the adjoining land changes to one where blanket bog and heath are important components of the landscape. In addition to river and lake habitats the site contains adjoining habitats of ecological interest such as raised bogs heath wet grassland and deciduous woodland.

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		The rivers and lakes support important populations of Lutra lutra Austropotamobius pallipes Lampetra planeri and Petromyzon marinus. The Moy system is one of the most important in Ireland for Salmo salar and is an internationally renowned fishery. It also has important stocks of Salmo trutta. Lough Conn supports a nationally important population of Anser albifrons flavirostris and has regionally important numbers of Cygnus cynus and Pluvialis apricaria (all Annex I Bird Directive species). The lakes support a range of other wintering waterfowl notably nationally important populations of Aythya fuligula and Bucephala clangula. Lough Conn / Cullin represents one of only 4 breeding sites in Ireland for Melanitta nigra which in Ireland is at the south-west end of its European range. The population however has seriously declined in recent years. A range of mammals listed in the Red Data Book occur within the site including Martes martes and Myotis daubentoni. At least five Red Data Book plant species occur including Cephalanthera longifolia and Spiranthes romanzoffiana.	Small pockets of conifer plantations close to the lakes and along parts of the rivers are included. Improved grassland is also included where it occurs along the river channels.
002339	Ballynamona Bog and Corkip Lough SAC	This site displays an excellent diversity of bog and wetland habitats. While the uncut high bog is mainly classified as degraded raised bog there is a small area of active raised bog within a central wet flush zone. Rhynchosporion vegetation is also represented with the presence of the scarce Rhynchospora fusca of some note. However the presence of bog woodland is of particular note as it is considered as one of the best-formed and most extensive areas of bog woodland in the country. Corkip Lough constitutes a good example of a turlough system containing both a permanent water area and an extensive area of seasonally inundated turlough grassland.	Ballynamona Bog and Corkip Lough is a diverse site situated in Co. Roscommon some 8 km west of Athlone. The site and surrounding land overlies limestone bedrock and the soils present are derived from limestone drift. The western half of the site is dominated by a turlough while the eastern half is dominated by a small raised bog complex a significant part of which is uncut high bog. Much of the site is surrounded by low esker ridges which contain areas of species-rich calcareous grassland and scrub. Corkip Lough fluctuates markedly throughout the year and during the summer the water level drops revealing a species-rich wetland flora.

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		In addition there are areas of species-rich calcareous grassland and fen which are of ecological interest. Overall the quality of the habitats occurring at this site is generally good with the areas of bog woodland and turlough being of particularly high ecological value. A number of relatively rare plant and animal species occur these include the rare aquatic invertebrate Eurycercus glacialis and the wetland plant Teucrium scordium. In general this site ranks as one of the most diverse and species-rich small sites in Co. Roscommon.	
002346	Brown Bog SAC	Brown Bog is one of the best examples of a small relatively intact midland raised bog in Ireland at present. The active bog is characterised by flat quaking areas with frequent pools and with a wet flush. Sphagnum cover is high and includes the relatively rare S. imbricatum and S. fuscum. Lichen cover mainly Cladonia spp. is high. The degraded area of high bog is relatively undisturbed and considered a good example of the habitat. It is possible that a significant portion of the degraded bog could be re-wetted in the future. Rhynchosporion vegetation is well-developed and of good quality. Lagopus lagopus a threatened and Red listed species in Ireland has been reported from the site. In general this small bog is of good quality and has been relatively free of damaging activities such as peat-cutting and drainage.	Brown Bog is a small midland raised bog situated approximately 7 km west of Longford town. Uncut high bog accounts for a relatively high proportion (c.70%) of the site though the largest part of this is classified as degraded bog. The high bog is surrounded by a rim of cutover bog much of which has been invaded by Betula pubescens scrub. Other habitats in the cutover zone are broad-leaved woodland a small stand of planted conifers and some wet grassland. A large area of cutover bog to the east of the site has recently been planted with conifers.
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 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.

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		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.	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.
004031	Inner Galway Bay SPA	Galway Bay is one of the most important ornithological sites in the western region. It supports internationally important wintering populations of Gavia immer and Branta bernicla hrota and regularly occurring nationally important populations of an additional 16 species most notably Mergus serrator (6.7% of national total) Charadrius hiaticula (3.3% of total) Anas clypeata (2.9% of total) and Limosa lapponica (2.5% of total). It supports the largest and the most regular population of Gavia arctica in the country. The bay is an important wintering site for gulls and is of national significance for at least Larus canus. Breeding birds of note are Phalacrocorax carbo Sterna sandvicensis and Sterna hirundo. The site provides both feeding and roost sites for most of the species though some birds commute to areas outside of the site. The birds of Galway Bay have been monitored annually since 1980/81. The site has one of the largest populations of Phoca vitulina in the country.	Galway Bay SPA is a very large marine-dominated site situated on the west coast of Ireland. The inner bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. Subsidiary bays and inlets (e.g. Poulnaclough Aughinish and Kinvarra Bays) add texture to the patterns of water movement and sediment deposition which lends variety to the marine habitats and communities. The terraced Carboniferous (Viséan) limestone platform of the Burren sweeps down to the shore and into the sublittoral. The long shoreline is noted for its diversity with complex mixtures of bedrock shore shingle beach sandy beach and fringing salt marshes. Intertidal sand and mud flats occur around much of the shoreline with the largest areas being found on the sheltered eastern coast between Oranmore Bay and Kinvarra Bay. Seagrass beds lie off Finavarra Point. A number of small islands composed of glacial deposits are included such as Deer Island along with some rocky islets.
004064	Lough Ree SPA	Lough Ree is one of the most important Midland sites for wintering waterfowl with nationally important populations of Anas penelope Anas crecca Anas acuta Anas clypeata Aythya fuligula and Bucephala clangula. Nationally important populations of Pluvialis apricaria and Vanellus vanellus are also associated with the lake.	Situated on the River Shannon between Lanesborough and Athlone Lough Ree is the third largest lake in the Republic of Ireland. It lies in an ice-deepened depression in Carboniferous Limestone. Some of its features (including the islands) are based on glacial drift. The main inflowing rivers are the Shannon Inny and Hind and the main outflowing river is the Shannon.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Regionally important numbers of Cygnus cygnus and Anser albifrons flavirostris are also found in the vicinity of the lake. The site supports a nationally important population of Sterna hirundo. Larus ridibundus breeds (nationally important) and Larus fuscus and Larus canus have bred in the past (recent census information is poor). Lough Ree is an important site for breeding duck and grebes with Aythya fuligula and Podiceps cristatus having populations of national importance. Of particular note is that it is one of the two main sites in the country for breeding Melanitta nigra a Red Data Book species. The woodland around the lake is a stronghold for Sylvia borin and this scarce species probably occurs on some of the islands within the SPA. Lutra lutra is frequent within the site and the fish Coregonus autumnalis pollan occurs.	The greater part of Lough Ree is less than 10 m in depth but there are six deep troughs running from north to south reaching a maximum depth of about 36 m just west of Inchmore. The lake has a very long indented shoreline and hence has many sheltered bays. It also has a good scattering of islands most of which are included in the site. The lake is classified as a mesotrophic system. The water of Lough Ree tends to be strongly peat-stained restricting macrophytes to depths of less than 2 m. Swamp vegetation especially of Phragmites australis occurs in the sheltered areas around the lake. The swamp often grades to species-rich calcareous fen or freshwater marsh. Lowland wet grassland some of which floods in winter is found in abundance around the shore. Some of the islands are wooded.
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 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.	The River Shannon and River Fergus Estuaries form the largest estuarine complex in Ireland. The site comprises all of the estuarine habitat west from 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). 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.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000297	Lough Corrib SAC	The site is of immense importance for the occurrence of scarce and specialised habitats as well as animal and plant species. Lough Corrib is the second largest oligotrophic lake in the country and is a superb example of a hardwater system. The site holds 14 Annex I habitats 6 of these are priority Annex I habitats of the EU Habitats Directive 5 Red Data Book plant species also Drepanocladus vernicosus and Lutra lutra and a rare chironomid Corynorera ambigua good populations of Margaritifera margaritifera Austropotamobius pallipes Petromyzon marinus and Lampetra planeri. The site also supports an important population of Salmo salar. Important for wintering and breeding birds with Anser albifrons flavirostris Sterna hirundo and Sterna paradisea.	Lough Corrib is situated directly north of Galway city and is the second largest lake in Ireland. The lake supports extensive Chara beds many wooded islands and large areas of swamp and fen in the shallow south-east section which lies on limestone. The north-west part is deeper wider and more oligotrophic. Shore is mainly karst bog and small areas of callow. The surroundings are farmland and holiday-home areas. Most of the main rivers and their tributaries which flow into the lake are included within the site including the Abbert Clare Cong Cornamona Dalgan Drimeen Grange Owenwee Owenriff and Sinking rivers. The River Corrib flows from the southern point of the lough into the sea at Galway city.
000497	Flughany Bog SAC	Flughany bog is a small raised bog site which contains examples of the Annex I habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). The bog is one of a series of small to medium-sized raised bogs which occur close to the north-westerly limit of raised bog formation along the border between counties Mayo and Sligo. The site supports a good range of raised bog habitats including well-developed pool and hummock area flushed areas (including a swallow-hole) and an area with shallow peat overlying a drumlin ridge. The site provides good habitat for both breeding and wintering Gallinago gallinago and also breeding Numenius arquata. Other typical bog fauna includes Lagopus lagopus and Lepus timidus hibernicus.	This area is probably underlain by carboniferous limestone bedrock with low permeability tills with a clayey matrix. The southern section of the site fills a depression between two drumlin ridges while the northern section consists of a thin layer of peat overlying a drumlin ridge.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000575	Ferbane Bog SAC	Ferbane Bog is an example of a relatively small raised bog site which contains good examples of the Annex 1 habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). Uncut high bog dominates the site and is surrounded by a narrow band of cutover. approximately 35% of the high bog surface consists of very wet active bog with the remainder degraded but capable of regeneration. Areas of poor-fen vegetation and birch woodland occur on cutover surfaces along the margins of the site and add to the habitat diversity.	This site is underlain by low permeability Waulsortian limestone bedrock. The subsoils are predominantly low permeability clay rich tills. The bog developed in a basin. This site represents a range in the variation seen in geomorphological setting.
000576	Fin Lough (Offaly) SAC	A diversity of habitats showing the transition from open water fen fen carr and raised bog are exhibited at the site and give rise to a rich diversity of plants and animals. One of the few open water areas in the county the lake is of value for wintering waterfowl. Site supports a population of Vertigo Geyeri and is also important for Chrysogaster macquarti and Platycheirus perpallidus.	A limestone lake surrounded by fen marsh fen carr and grading into surrounding pasture grassland. Drainage works to facilitate peat milling activities adjoining the site have accelerated the seral development from open water to fen and raised bog with large areas of the former lake basin now overgrown by reedswamp and scrub woodland.
000597	Carrowbehy/Caher Bog SAC	Carrowbehy/Caher Bog is an important example of a medium-sized raised bog site which contains examples of the Annex I habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). Other important habitats which occur within the site include dry heath and alkaline fen. Along the south-eastern edge of the northern lobe there is an area of semi-natural lagg which supports alkaline fen and poor fen vegetation. Lagg areas such as this are of great interest in terms of hydrology and vegetation and are now very rare features of raised bog systems in Ireland.	This site is probably underlain by lower carboniferous limestone with increasing shale content towards the top. The increasing shale corresponds to decreasing permeability. The subsoils are dominated by glacial till and fluvio-glacial deposits with a moderate to high permeability. An impermeable iron pan has been noted which probably allowed peat development. The bog has developed in a depression between drumlin ridges to the east. A thin layer of peat has developed over a drumlin ridge forming a heath. Part of the cutover bog has been converted to improved grassland but is included in the site for hydrological reasons.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		The relatively rare sedge Rhynchospora fusca has been recorded from wet pools within the site and Lagopus lagopus a Red Data Book species has also been noted.	
000609	Lisduff Turlough SAC	The turlough has a good zonation of oligotrophic vegetation which is unusual. It also is very little modified by grazing or drainage and lies in a thinly populated area. It has more breeding waders (including dunlin) than other sites of comparable size and in winter supports a good diversity and population of wildfowl.	Lisduff lies in a shallow basin among low hills of glacial drift and occasional rock outcrops (as on the north-east side). There is a semi-permanent inflow from the north-west arm and the site is relatively wet with good development of fen peat. Ground water is highly calcareous and there is precipitation of marl (CaCo3). The site is highly oligotrophic and not much grazed.
000612	Mullygollan Turlough SAC	The site has considerable diversity of habitat and intrinsic interest although it is relatively small. It is the only turlough known with Carex aquatilis. It is one of a group of similar sites around Castleplunket which share the winter bird populations described. It also supports four species of nesting waders.	The turlough lies in a shallow basin with rock outcrops along its northern edge. A semi-permanent stream enters from the west and flows to a swallow hole in rock. The floor retains a high water table with ditches in summer and there is significant peat accumulation. Fen vegetation covers this peat: there is little formation of marl (CaCo3) at present.
000614	Cloonshanville Bog SAC	Cloonshanville Bog is a medium-sized raised bog site which contains good examples of the Annex I habitats bog woodland active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). The area of bog woodland is dominated by Betula pubescens and has a wet Sphagnum-rich ground flora. This woodland has developed along an extensive linear drainage feature and ranks as one of the most extensive and well-preserved examples of wet bog woodland in the country. The ombrotrophic bog habitats present are of good quality and support large populations of the rather rare Sphagnum pulchrum. An area of calcareous fen which occupies the site of a former lake adds to the overall ecological interest of the site. The bog supports breeding Gallinago gallinago.	This site is probably underlain by low permeability clayey carboniferous limestones. The sub-soil geology of the area is dominated by clayey tills and clays. The bog developed in a shallow basin in a ground water discharge zone. The regional water table has been lowered but evidence of ground water inputs are seen on and around the high bogs. Part of the cutover bog has been converted to improved grassland but is included in the site for hydrological reasons.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000622	Ballysadare Bay SAC	This large site displays an excellent diversity of coastal habitats. The estuarine and intertidal sand and mud flat habitats are typical of the region and are extensive in area and of good quality. The sand dune system is highly dynamic with the tip of the peninsula actively growing and displaying a good though limited example of embryonic shifting dunes. The shifting marram dunes are fairly extensive in area and are also displaying signs of growth. An area of fixed dunes of moderate size also occurs which has a flora typical of western dunes. A small area of humid dune slack remains. Actively developing dune systems are rare in western Ireland. Site is important for occurrence of the Annex II mollusc Vertigo angustior. A nationally important colony of Phoca vitulina also occurs. An excellent diversity of waterfowl winter at site including two Annex I Bird Directive species (Pluvialis apricaria Limosa lapponica). Six other species winter in nationally important numbers and there is an internationally important population of Branta bernicla horta. A number of localised insect species are known from the site.	Ballysadare Bay is the most southerly of the three inlets of Sligo Bay. It is the estuary of the Ballysadare River which receives the flows of the Unshin Owenboy and Owenbeg rivers. The Ballysadare River flows through the small town of Ballysadare before entering the bay. It is a large site extending along a 10 km south-east to west-north-west axis from Ballysadare town to the sea at Marley's Point. The bay has an average width of c.2 km. A sand dune spit extends into the outer bay at Culleenamore restricting the outlet to the sea to a width of c.700 m. Other habitats present include salt marshes small saline lakes or ponds dry grassland wet grassland reedbeds and scrub. Recreation is a main landuse within the site.
001242	Carrownagappul Bog SAC	This important raised bog site supports good examples of the Annex I habitats active raised bog degraded raised bog (capable of regeneration) and Rhynchosporion vegetation. It contains one of the largest extant areas of uncut high bog surface in East Galway and the area of active raised bog is also relatively large. The bog surface also contains a number of flushed areas including a very interesting wooded swallow-hole flush system. Such areas add greatly to the overall habitat diversity of the site.	This site is underlain by shallow water carboniferous limestones which have a moderate to high permeability depending on the amount of karstification. Subsoils are dominated by silty and clayey tills. Some very low relief eskers run under the bogs. A till island lies in the centre of the site and this is not covered by peat.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Important bird species which have been noted from the site in the recent past include Lagopus lagopus and Circus cyaneus (visiting during the winter).	
001571	Urlaur Lakes SAC	A relatively unpolluted system of oligotrophic marl lakes typical of several in the region with a diversity of semi-natural habitats bordering the open water. The lakes are of local importance for a variety of wildfowl including Cygnus cygnus Aythya ferina and Anas penelope amongst others.	A series of three oligotrophic marl lakes Lough Roe Lough Nanoge and Urlaur Lough located in the upper catchment of the Boyle River surrounded by pasture grassland raised bog and heath with some calcareous fen reedswamp and dry calcareous grassland on the lake margins.
001625	Castlesampson Esker SAC	The importance of this site lies in its almost intact structure something that is very rare in Irish eskers in its relatively undisturbed nature and in the presence of good quality species-rich dry calcareous grassland. The absence of large blocks of scrub on the esker is notable. This grassland vegetation supports a rich variety of species some of which are rare on eskers or in the midlands including four orchid species. The rare Erigeron acer a Red Data Book species is found in the three gravel pits on the site. The protected Acinos arvensis occurs in a gravel pit on the site north of the main road. The site includes a series of turloughs.	The site is dominated by a steep-sided esker composed of glacial gravels. The vegetation of most of the esker is of dry grassland with small amounts of scrub scattered throughout. Improved grassland occurs commonly on the site; this is found mainly on the level ground at the base of the esker. Three gravel pits occur within the site. These support mainly open vegetation including two rare plant species. One of the gravel pits supports a number of fen species.
001637	Four Roads Turlough SAC	The uniformity of the basin and the fertilisation of its eastern half means that there is little interest in the vegetation. However the site is used as a refuge or feeding area by herbivorous wildfowl and waders - some of which occur in numbers of national importance.	Four Roads or Cloonloughlin Turlough lies 2.5 km from the Suck River below a low scarp of limestone hills. It is an open shallow basin without permanent standing water. It seems to flood predictably and dry out quite early. The vegetation is uniform in general and of two main types - grass in the east and sedges in the west. It is grazed intensively.

Site Code	Site Name	Quality of Site	Other Site Characteristics
002032	Boleybrack Mountain SAC	This site supports an excellent diversity of montane habitats over a fairly extensive area. Active blanket bog dry heath and wet heath are particularly well represented with good examples also of Molinia meadows and dystrophic lakes. In addition the site contains some areas of scrub (at low elevations) streams and cliff. Although much of the surrounding low-lying land has been afforested with conifers the quality of the remaining upland area is good with relatively low levels of disturbance from damage such as grazing and burning. The site supports breeding Pluvialis apricaria and Lagopus lagopus. It also has a number of scarce plant species for the area notably Vaccinium vitis-idea and Vaccinium oxycoccus. The site is also important from a scenic perspective and is one of a number of important upland heath/blanket bog sites which occur close to the border with Northern Ireland.	Boleybrack mountain is an extensive area of montane habitat which occurs along the Cavan/Leitrim border a few kilometres north of Lough Allen. The dominant bedrock within the site is a sedimentary gritstone which contains seams of coal in places. This coal has been mined in the past. The site is dominated by heath and blanket bog with dystrophic/oligotrophic lakes scrub and inland cliff covering a small proportion of the site area. Coniferous forestry is frequent on the lower slopes of the mountain and forms the site boundary in many places.
002110	Corliskea/Trien/Cloonfelliv Bog SAC	This relatively large site supports very good examples of the Annex I habitats active raised bog bog woodland degraded raised bog and Rhynchosporion vegetation. The condition of the habitats is generally good and a large area of uncut high bog surface (c.460 ha) still remains. Perhaps the most striking feature of the site is the extent and high quality of bog woodland and flush habitats that occur. Some parts of the site contains extensive surface drainage features which are of considerable hydrological and ecological interest. The nationally scarce shrub Frangula alnus has been recorded from areas of bog woodland recently and a rare liverwort species Cephalozia elachista also occurs.	The bedrock of this area is low permeability clayey bioclastic carboniferous limestone. The subsoils are dominated by sandstone rich silty/clayey tills. At the SE side of Corliskea Lake clays were recorded. The peat developed in inter-drumlin hollows.

Site Code	Site Name	Quality of Site	Other Site Characteristics
002200	Aughrim (Aghrane) Bog SAC	The Degraded Raised Bog (DRB) occurring at Aughrim (Aghrane) Bog SAC is of considerable conservation significance. Recent restoration actions has resulted in active redevelopment of the habitat with an increase in regenerating raised bog microhabitats including open water wet hollows and wet lawns which is adding to the diversity and scientific value of the site. A good range of bog mosses is present including Sphagnum fuscum (sensu lato) and S. austinii. The SAC is located along the south-eastern margins of the Aughrim Bog NHA (001227) and is considered to constitute supporting habitat for an extensive area of Active Raised Bog and Degraded Raised Bog habitat in the NHA. There are few significant threats to the high bog and there is good restoration potential from appropriate conservation measures. The site is being actively managed for conservation as part of an EU LIFE project by the landowner Coillte. For these reasons the site is considered to be of good conservation value.	The raised bog at Aughrim (Aghrane) Bog SAC 002200 comprises approximately 110.33 ha of western raised bog habitat of which 100.18 ha is high bog and 10.15 ha cutover bog. The SAC occurs within the south-eastern section of Aughrim Bog NHA (001227) and occupies just over 40% of that site. The underlying geology is carboniferous limestone. The SAC is dominated by open high bog vegetation characteristic of the Western raised bog type with approximately 37 ha of previously afforested high bog and cutover along the southern and eastern margins. These afforested areas were clear-felled within the last five years and the intensive drainage system associated with the conifer plantations blocked in 2013-15. Since the removal of conifers peatland vegetation is beginning to re-establish. Most of the significant drains on the open high bog with the exception of boundary and eastern section of roadside drains were also blocked. The restoration works were undertaken as part of an EU funded LIFE project so as to raise the water table and maintain and restore Active Raised Bog (ARB) on the site. 4.28 ha of Degraded Raised Bog (DRB) have been predicted within the SAC. This habitat is rapidly rewetting and spreading following the restoration. In addition it is estimated that restoration works carried out on this site will benefit the conservation of 3.5 ha of Active Raised Bog and 3.5 ha of Degraded Raised Bog in the adjacent area of Aughrim Bog NHA (001227). The alien invasive Rhododendron (Rhododendron ponticum) is established in marginal/cutover areas along the eastern margins of the site and this is being controlled as part of a Coillte/EU LIFE restoration programme.
002336	Carn Park Bog SAC	Although a relatively large proportion of this site has been afforested it still contains a substantial area of active raised bog. This is typical of the midland raised bog type with hummock/hollow complexes pools and Sphagnum lawns.	Carn Park Bog lies approximately 8 km east of Athlone. It comprises an area of uncut high bog and surrounding cutover areas. Part of the high bog is active raised bog though the greater part is classified as degraded. A substantial area of the degraded high bog and the cutover bog has been planted with conifers.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		The diversity of Sphagnum species is notably high and includes the nationally rare Sphagnum pulchrum. Degraded raised bog is also well represented though part of this has been afforested. The areas of cutover bog which have not been planted add to the biodiversity of the site.	Part of the cutover bog has been invaded by Betula pubescens scrub. Further afforestation occurs adjacent to the site.
002348	Clooneen Bog SAC	This is a relatively large midland raised bog complex which is one of the most northerly in the country. Although the high bog surface is rather dry and predominantly classified as degraded bog there is good habitat diversity with wet bog woodland pool systems and flush areas present. The area of bog woodland which is mainly of Betula pubescens is of particular interest as it ranks as one of the most extensive examples of the habitat in the country. Rhynchosporion vegetation appears to be well developed if somewhat limited in extent and contains the relatively rare Rhynchospora fusca.	Clooneen Bog is located on the east bank of the River Shannon approximately 3 km south-east of Roosky Co. Longford. The site contains a large area of rather dry uncut high bog surrounded by cutover bog. The majority of the high bog is classified as degraded raised bog with only a very small area of active bog. The cutover is now mostly semi-improved or wet grassland with a small area of improved grassland also present. Some Betula pubescens scrub also occurs on the cutover.
002350	Curraghlehanagh Bog SAC	This site contains good examples of active raised bog degraded raised bog and Rhynchosporion vegetation. A relatively undisturbed core of wet active bog occurs in the centre of the high bog area and has a high Sphagnum cover which includes scarce species such as Sphagnum fuscum and S. imbricatum. There is a substantial area of degraded raised bog which despite drying out still retains a good cover of raised bog vegetation. Rhynchosporion vegetation is best developed in the area of active bog where it is frequent in the inter-pool areas. The broadly ovoid outline of this bog is a positive feature for restoration. The site is one of a cluster of small to medium-sized bogs in the east Galway area.	Curraghlehanagh Bog is a medium-sized raised bog site located 6 km north of Mount Bellew village in the eastern half of County Galway. The bog overlies Carboniferous limestone bedrock and occupies a relatively low-lying plateau within the upper reaches of the Shivan river. Land surrounding the site is rather flat and is dominated by agricultural grassland. Much of the uncut high bog is surrounded by cutover surface with small areas of scrub and semi-improved grassland present on the cutover. The northern part of the cutover has been afforested within the past few decades.

Site Code	Site Name	Quality of Site	Other Site Characteristics
004036	Killala Bay/Moy Estuary SPA	This site is a fine example of an estuarine system in a natural state. It supports an excellent diversity of wintering waterfowl and is one of the most important sites in the region. Six of the species have populations of national importance: Limosa lapponica Charadrius hiaticula Pluvialis squatarola Calidris alba Calidris canutus and Calidris alpina. Pluvialis apricaria also occurs in numbers close to national importance. There is a regular population of Branta bernicla hrota which in some winters exceeds the threshold for international importance. Gavia stellata is regular within the site. The Red Data Book species Groenlandia densa occurs in the site.	This large site comprises the inner estuarine part of Killala Bay at the mouth of the River Moy. It is a funnel-shaped estuary that is approximately 7 km wide at its outer limit. The site is well-sheltered by a sandy island Bartragh Island that extends across much of the outer part and by a sandy peninsula which extends from Enniscrone on the eastern side. Extensive intertidal sand and mud flats are exposed at low tide. Salt marshes skirt part of the intertidal flats.
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.

Site Code	Site Name	Quality of Site	Other Site Characteristics
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 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.	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.
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).	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.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		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 is 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 Locustella naevia and Alauda arvensis. In autumn and winter Circus cyaneus is a regular visitor.	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.
004140	Four Roads Turlough SPA	Four Roads Turlough is an important site for wintering waterfowl. In most winters it is visited by the nationally important River Suck population of Anser albifrons flavirostris. The site also supports a nationally important population of Pluvialis apricaria (2.3% of the all-Ireland population). Other species which occur regularly include Anas penelope Anas crecca Anas platyrhynchos Anas clypeata and Vanellus vanellus. It is also occasionally used by Cygnus cygnus. Breeding species include Vanellus vanellus and Gallinago gallinago.	Four Roads Turlough (also known as Cloonlaughnan Turlough) is located 6 km south of Athleague Co. Roscommon and just over 2 km east of the River Suck. It lies below a low scarp of limestone hills and is an open shallow basin without permanent standing water which floods regularly and dries out early.

Site Code	Site Name	Quality of Site	Other Site Characteristics
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.	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
		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 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.	
000218	Coolcam Turlough SAC	This appears to be a very natural site with excellent representation of the vegetation types found in wetter turloughs. Further study would probably yield rare plant species e.g. Rorippa islandica. The wetness of the habitat is an important factor for the bird life which seems rich.	Coolcam consists of two separate basins in an extensive area of eskers and glacial deposits. The larger basin has large amounts of aquatic vegetation and marl (CaCO3) deposition: the smaller is more clayey. Most of the turlough dries out for a short period (e.g. August - October). Other small depressions in the S.E. corner also flood. Land use is of low intensity.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000268	Galway Bay Complex SAC	The site has very important and good quality examples of large shallow inlets and bays intertidal mud and sandflats and reefs. The area has the country's only recorded example of the littoral community characterized by Fucus serratus with sponges ascidians and red seaweeds on tide-swept lower eulittoral mixed substrata. Sublittorally the area has Ireland's only reported piddock bed an extensive maerl bed of Phymatolithon calcareum an oyster bed and seagrass beds. A host of rare marine organisms occur including the sea urchin Paracentrotus lividus the sponge Mycale contarenii the red algae Phyllophora sicula and Rhodymenia delicatula. Lagoons are particularly well represented and varied in type size and salinity. Of especial importance are the rare karstic rock lagoons of which the site holds all but one of the examples known from the mainland of Ireland. Good quality salt marshes of both Atlantic and Mediterranean types are well represented and occur along with perennial vegetation of stony banks. A very good though limited example of calcareous grassland rich in orchids occurs and there are examples of alkaline fen and Juniperus communis scrub of moderate quality. Two Red Data Book stoneworts occur Chara canescens and Lamprothamnium papulosum and also two Red Data Book vascular plants - Crambe maritima and Hyoscyamus niger. The site has one of the largest populations of Phoca vitulina in the country and provides optimum habitat for Lutra lutra. Galway Bay is a very important ornithological site with an internationally important wintering population of Branta bernicla hrota and regular nationally important populations of a further 16 species including Gavia immer Gavia arctica Pluvialis apricaria and Limosa lapponica.	The Galway Bay Complex is a very large marine-dominated site situated on the west coast of Ireland. The inner part of the south bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. Subsidiary bays and inlets (e.g. Poulnaclough Aughinish and Kinvara Bays) add texture to the patterns of water movement and sediment deposition which lends variety to the marine habitats and communities. The terraced Carboniferous (Visean) limestone platform of the Burren sweeps down to the shore and into the sublittoral. West of Galway city the bedrock geology is granite. The long shoreline is noted for its diversity with complex mixtures of bedrock shore shingle beach sandy beach and fringing salt marshes. Other habitats which occur in small amounts include lagoon fen turlough dry grassland wet grassland and deciduous woodland.

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		Breeding birds of note are Phalacrocorax carbo Sterna sandvicensis and Sterna hirundo.	
000295	Levally Lough SAC	Levally is in good condition and is unusual for being at the wet end of turlough variation. It must therefore have a distinct flora and fauna though this is not yet known in detail. Diversity in the vegetation seems small but rather higher in the birdlife - particularly breeding waterfowl.	This is a turlough that remains flooded for a long period and in some years never goes dry. It contains a large area of marl (precipitated CaCO3) as well as aquatic vegetation with willows Salix sp. The amount of marginal grassland flooded is relatively small. There is a swallow hole and inflowing stream at the eastern end.
000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	Lough Lurgeen bog and Glenamaddy turlough is one of the largest and most important wetland sites in Ireland. The site supports very good examples of the Annex I habitats active raised bog turlough degraded raised bog and Rhynchosporion vegetation. The raised bog present constitutes the second largest extant area of uncut raised bog surface in the country. The turlough system is also large and is important from an ornithological point of view supporting populations of Anser albifrons flavirostris Cygnus columbianus bewickii and Cygnus cygnus. Viola persicifolia a protected plant species has been recorded from the seasonally inundated turlough bed. The combination of raised bog turlough and linking stream is unique in Ireland and probably does not occur elsewhere in the world.	Site is probably underlain by low permeability fossiliferous limestones with subsoils dominated by limestone/sandstone till. The bog plays an important role in the hydrology of the Glenamaddy area as most of the high bog forms the catchment for the turlough (70% of total catchment). The system is an important example of an integrated bog - turlough association. Two drumlins run under the high bog and between them a unique spring fed lake occurs. Some areas of improved grass are included in the site as they are used by Anser albifrons flavirostris.
000326	Shankill West Bog SAC	Shankill West Bog is one of the best examples of a relatively small raised bog site in the country and contains good examples of the Annex 1 habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). The high bog dome contains a wet central core of active raised bog which is of high quality containing extensive quaking lawns and pool systems.	This site is underlain by shallow water bioclastic carboniferous limestones which have a moderate to high permeability depending on the degree of karstification and number of fissures. Silty limestone tills dominate the subsoils. These have a moderate permeability. The bog occupies a small basin surrounded by drumlin ridges. To the north peat has encroached onto the drumlin with a natural gradation from bog to mineral soil. There is a small discharge area at the base of this drumlin which gives rise to an area of alkaline fen.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		On areas along the northern and southern margins of the site at the transition between raised bog and the higher mineral ground there are areas of infiltration lagg influenced by upwelling base-rich water. This lagg area supports fen vegetation of high ecological interest which adds greatly to the overall interest of the site.	Part of the cutover bog has been converted to improved grassland but is included in the site for hydrological reasons.
000440	Lough Ree SAC	One of the largest and most important lakes in Ireland Lough Ree is an excellent example of a natural eutrophic system. The woodlands at the site are considered the best in the midlands. The site also contains very good examples of degraded raised bog much of which retain a typical raised bog flora and which could be improved by restoration works. Bog woodland is also represented though some of this is planted Pinus species. A further area of wet woodland on cutover peat is notable for the abundance of Frangula alnus. Good to moderate examples of alkaline fens and calcareous dry grasslands also occur. Limestone pavement with species-rich woodland occurs at Rathcline. Several Red Data plant species occur. Lutra lutra is frequent on the site and the fish Coregonus autumnalis pollan has been recorded. It is an important bird site for wintering and breeding waterfowl and has a colony of Sterna hirundo. It is of particular importance for the breeding population of Melanitta nigra as it is one of only three sites for the species in Ireland. Water quality of the lake is considered good.	A large mesotrophic moderate-eutrophic lake situated in an ice deepened depression in carboniferous limestone on the River Shannon. Greater part is less than 10 m in depth but there are deep troughs from north to south of depths between 17-33 m. Lough Ree has a long and much indented shoreline mostly stony with some gravel and sand. In parts reed swamp alkaline fen bog freshwater marshes wet and dry grassland and wet woodland occurs. Numerous islands some wooded occur in the lake. Dry broad-leaved woodland of good quality is included in site. Lough Ree is surrounded by agricultural land of moderate to high intensity and is close to Athlone town. Eutrophication may be a problem but at present Lough Ree is less affected than other midland lakes notably Lough Derg.
000448	Fortwilliam Turlough SAC	Fortwilliam is the most important turlough in Co. Longford and the 004 NUTS region and one of only two good examples east of the Shannon. It has a diverse vegetation with particularly large stands of nutrient-poor marsh containing normally calcifuge plants.	The turlough area includes a more or less permanent waterbody with scattered reeds a woodland which is partly flooded in winter ungrazed tall herb vegetation and grassland.

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		The woodland is also unusual and goes with a historic low intensity of grazing. There is no sign of drainage in the basin and little sign of eutrophication.	There is considerable precipitation of marl (CaCO3) associated with ground water input and a lack of surface flow. Rock outcrops occur on the North East side with boulders on the turlough floor.
000458	Killala Bay/Moy Estuary SAC	This large site displays an excellent diversity of dune types and is one of the most important dune systems in the north-west region. There remains a substantial area of intact fixed dune despite modifications to parts of the site for recreational and agricultural purposes. Some humid dune slacks also occur and there are good and fairly extensive examples of shifting dunes with marram embryonic shifting dunes and annual vegetation of driftlines. Salt marshes are well represented with both Atlantic salt meadows and Salicornia types present. The Moy estuary is an important example of an estuary and has extensive intertidal sand and mud flats. Water quality is very good. The site is important for the occurrence of the Annex II mollusc Vertigo angustior which occurs in marsh habitat. An excellent diversity of waterfowl winter at site including two Annex I Bird Directive species (Pluvialis apricaria Limosa lapponica). Seven other species winter in nationally important numbers and in some winters internationally important concentrations of Branta bernicla hrota occur. Two Red Data plant species are known from site. The site supports an important population of Phoca vitulina and both adult and juvenile Petromyzon marinus.	Situated on the north Mayo/Sligo coast this large site comprises the inner part of Killala Bay including the estuary of the River Moy from downstream of Ballina. The towns of Enniscrone and Killala occur on the eastern and western shores respectively. Sand dunes systems estuaries and intertidal areas are the main habitats of the site. Bartragh Island a sand bar on which a dune system has developed stretches across most of the outer part of the site. A further dune system protrudes westwards from Enniscrone while more dunes occur at the Ross peninsula in the north-west of the site. Other habitats present include salt marshes dry grassland reedbeds and scrub.

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000588	Ballinturly Turlough SAC	Ballinturly is the fourth largest active turlough still extant and has a wide range of habitat and vegetation. The recent survey identified 16 plant communities there out of a possible 32. Despite a seasonal connection with the Suck the groundwater is oligotrophic enough to support normally calcifuge water plants. The site also is the base for a large wintering bird population including Anser albifrons which uses adjacent smaller sites also.	Ballinturly occupies a large v-shaped basin close to the River Suck and in contact with it in high floods. It has a shallow lake/fen at the lowest point and tapers off with cutover bog and a limestone quarry at the points of the 'v'. Peat underlies a significant part of the southern limb giving way to grassland on mineral soil elsewhere. There is some marl ($CaCO_3$) formation occurring in the lake and it was more widespread in the past. A little flooded woodland occurs at the south-west end.
000595	Callow Bog SAC	This large bog site contains significant examples of active raised bog degraded raised bog and Rhynchosporion vegetation. The presence of a large and mostly wet Molinia flush on the high bog is an unusual feature and its presence adds to the interest of the site. It is thought that this flush is mostly natural in origin being associated with shallow peat along a mineral ridge. A number of scarce plant species notably Sphagnum fuscum S. imbricatum and Frangula alnus occur and these add to the overall floristic interest. The site is one of a number of relatively intact western raised bog sites along the Roscommon/Sligo border and these together form an important cluster of sites. Although the quality of the habitats is not high due to drying-out and recent burning events the site is extensive and does occur close to the north-western limit of raised bog distribution in the Republic of Ireland. The site shares a common boundary with the Lough Gara Special Protection Area.	Callow Bog is a medium to large raised bog site located on the southern shores of Lough Gara approximately 6 km north-east of Ballaghaderreen County Roscommon. Much of the site is relatively flat with slight slopes towards Lough Gara. The uncut high bog occurs as 5 distinct lobes of varying size which are separated by cutover bog. Parts of the cutover are colonised by secondary habitats of ecological importance such as scrub reedbeds and marsh. A small area of coniferous forestry occurs within the site with more along the margins of the site. Some of the marginal areas of cutover have been converted to semi-improved grassland. A number of roads and tracks traverse the site which fragments it to some degree.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000636	Templehouse and Cloonacleigha Loughs SAC	Site contains an excellent diversity of wetland habitats including good examples of hard water lakes and floating river vegetation. A number of rare plant species occur including the Red Data Species Lathyrus palustris. The site is of regional importance for wintering waterfowl.	The site includes three loughs Templehouse Clooncleigha and the much smaller Killawee Lough all interconnected by the sluggish and meandering Owenmore River. These are situated on Carboniferous limestone but their catchment includes the surrounding low peat covered hills. The peat gives the hard water a marked colour and the water contains significant amounts of iron. The site supports a diversity of wetland habitats such as river lakes wet grassland swamp bog and wet woodland.
001818	Lough Forbes Complex SAC	Lough Forbes Complex is an extensive and important midland site which contains significant examples of the Annex I habitats natural eutrophic lake active raised bog alluvial woodlands degraded raised bog and Rhynchosporion vegetation. Other habitats of note occurring include mixed ash/oak woodland dry grassland and cutover raised bog. In many areas there are good examples of relatively undisturbed transitions from lake and river to adjoining terrestrial habitats such as wet grassland and raised bog. The lake callow and raised bog areas provide feeding and roosting sites for a flock of wintering Anser albifrons flavirostris. The site is within a breeding territory of Falco columbarius.	A complex of naturally eutrophic lake fed by the River Shannon and Rinn River with extensive reed bed development and natural transitions to flooded grasslands marsh and two active raised bogs. The Castle Forbes estate on the eastern shore of the lake is extensively planted with mature semi-natural woodland including some stands of old oak wood. The site is located in the north central midlands at a low elevation and overlies Carboniferous Limestone with a variable thickness of glacial tills.
001899	Cloonakillina Lough SAC	A rich variety of plant species and communities in a relatively small area showing interesting stages in the development from open water transition mire fen wet woodland and bog. Sites of this kind in good condition are relatively uncommon in Ireland. This area also supports small numbers of a variety of waterfowl many of which breed amongst the relatively undisturbed vegetation.	A small meso-eutrophic lake with extensive development of transitional mire vegetation over the western side of its basin set in undulating terrain amongst several raised bogs.

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002296	Williamstown Turloughs SAC	The site has been ranked as the 11th most important turlough complex in Ireland. It is notable for the high diversity of vegetation communities with 14 true turlough plant communities. Rorippa islandica a Red Data Book species and a characteristic turlough species occurs. The site supports a good diversity of wintering waterfowl including Pluvialis apricaria though numbers of most species are relatively low. The site also supports a range of breeding waders notably Vanellus vanellus and Gallinago gallinago. Drainage works carried out in 1996 aimed at reducing the flood levels could have significant long-term adverse impacts on the ecological interests of the site.	The site consists of a complex of three separate turlough type wetlands: Gortduff Polleagh Lough and Curragh Lough. The turloughs are connected to the same water body with water flow in a westerly direction. The contributing catchment is small and flood levels only rise after extended periods of heavy rain. The area is underlain by carboniferous limestone. An esker ridge runs in a N-S direction along the eastern margin of the site and a further ridge lies to the north-west of the site. Other habitats included in the site are cutover bog wet grassland and dry grassland. Areas of improved grassland are included for water quality reasons. Much of the site is grazed.
002337	Crosswood Bog SAC	Although there is a relatively large amount of disturbance along the margins of the high bog the high bog supports a relatively large area of wet active raised bog. This is characterised by a high Sphagnum cover which includes an abundance of the rare species S. pulchrum and S. fuscum. The site also has a substantial area of degraded raised bog which exhibits a wide range of vegetation types indicative of degradation including a partially wooded flush. Crosswood bog is one of the better quality medium-sized raised bogs in Co. Westmeath and is one of a number of important medium-sized raised bogs to the east of Athlone.	Crosswood Bog is a medium-sized midland raised bog located 5 km east of the town of Athlone. The site consists of a core of uncut high bog surrounded by cutover surfaces. Approximately one-third of the high bog is active bog the remainder being degraded. Along the southern margins of the cutover there has been extensive afforestation with conifers. Scrub woodland dominated by Betula pubescens is frequent in the south-western part of the cutover.
002338	Drumalough Bog SAC	Drumalough bog contains good examples of raised bog habitats. There is a relatively large amount of uncut high bog of which a significant area is active bog (the remainder is classified as degraded). Rhynchosporion vegetation is well represented in the wetter areas of the bog.	Drumalough Bog is a medium-sized raised bog located 5 km north-west of Castlerea town Co. Roscommon. The site is divided into three parts two of which are areas of raised bog the third a small lake surrounded by extensive marshy grassland. The areas of uncut high bog are surrounded by extensive areas of marginal cutover bog some of which has been reclaimed for grassland. Substantial areas of the high bog have also been afforested with conifers.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Both of the raised bog areas have been partially afforested recently and this combined with peripheral peat cutting has resulted in a deterioration in habitat quality though habitat diversity is high. The area of lake and associated marshy grassland add to the diversity of this site. The site is located close to the north-western limit of raised bog distribution in the Republic of Ireland.	The site is surrounded by a number of extensive raised bog areas most of which have been either cutover or afforested.
002349	Corbo Bog SAC	The uncut surface of Corbo Bog contains a small but substantial area of active raised bog which includes a few small flushed areas. There is a good Sphagnum cover and species diversity including the relatively rare Sphagnum imbricatum and S. fuscum. The active area is within a larger area of degraded raised bog. The degraded bog retains a typical raised bog flora although there is little or no evidence of an active catotelm in the degraded areas. Rhynchosporion vegetation is well-developed in the wetter areas of the high bog and includes Rhynchospora fusca which is a relatively rare species in Ireland. Overall this site contains a reasonably large area of uncut high bog.	Corbo Bog is a medium sized raised bog located 7 km west of Lanesborough village in Co. Roscommon. It is one of a number of raised bogs in the area though most of these have been cut to supply peat to power stations. The bog overlies Carboniferous limestone bedrock. Almost 60% of the site is uncut high bog though most of this is classified as degraded bog. The area of high bog is L-shaped and rather narrow. Cutover bog often invaded by Betula pubescens scrub surrounds much of the high bog. Some small areas of wet grassland are included in the site.
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 water table 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.	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.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		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.	
004048	Lough Gara SPA	Lough Gara supports an internationally important population of Anser albifrons flavirostris and at times the numbers of Cygnus cygnus have exceeded the qualifying threshold for international importance. Both species use the site for roosting and to some extent for feeding. The site supports a range of other waterfowl species though all in relatively low numbers - these include Anas penelope and Pluvialis apricaria.	Lough Gara is a shallow (maximum depth 16 m) medium-sized limestone lake. The main inflowing river is the Lung while the main outflow is the Boyle River. There are two main sections a larger northern basin and a smaller southern basin joined by a narrow channel. The lake is classified as a mesotrophic system. The shoreline is convoluted and has receded substantially from its original level due to various drainage schemes since the mid 19th century. The shallow lake margins have extensive swamp vegetation. The old lake shore is usually clearly visible below which a sedge-rich marsh occurs. The upper part of the shore and adjoining abandoned fields are frequently colonised by scrub and wet woodland. The site encompasses some low-lying islands. Raised bog occurs outside of the site to the south and south-west.
004050	Lough Arrow SPA	Lough Arrow is an excellent site for breeding Podiceps cristatus the population being of national importance. A range of other duck species breed on the lake including Melanitta nigra and Mergus serrator. Larus canus and Larus fuscus breed in significant numbers on islands in the lake. The lake supports moderate numbers of wintering waterfowl. Diving ducks are well represented with Aythya fuligula and Bucephala clangula occurring in numbers of regional importance. Other species such as Fulica atra and Tachybaptus ruficollis also occur as well as small numbers of Cygnus cygnus. The site has been poorly monitored in recent years and regular monitoring may show that some of the species have populations of national importance.	Lough Arrow is a large limestone lake sheltered on three sides by hills. It has a small catchment and is fed largely by springs on the lake bed. Its average depth is 9 m to a maximum of 33 m. The lake is classified as a mesotrophic system. There is a well-developed submerged aquatic flora with a notable charophyte community. The shores of the lake are for the most part stony though several bays occur in which swamp vegetation is found in abundance. In places the reedbeds extend well out into the lake.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Lough Arrow has good fish stocks including Salmo trutta and Anguilla anguilla.	
004129	Ballysadare Bay SPA	Ballysadare Bay is an important component of the larger Sligo Bay complex. It supports nationally important populations of four species: Calidris alpina Limosa limosa Tringa totanus and Tringa nebularia. It also has a good diversity of other waterfowl species including Branta bernicla hrota Cygnus cygnus Mergus serrator Pluvialis apricaria and Charadrius hiaticula. The estuarine habitat is of good quality and the site provides both feeding and roost sites for the birds.	Ballysadare Bay extends for about 10 km westwards from the town of Ballysadare and is the most southerly of three inlets comprising the larger Sligo Bay complex. The bay has an average width of c. 2 km. The estuarine channel of the Ballysadare River winds its way through the bay finally reaching the open sea near the sand spit at Culleenamore. The bay is underlain by sedimentary rocks of limestones sandstones and shales which are exposed as low cliffs and small sections of bedrock shore at several locations. The site contains extensive intertidal sand and mudflats which support good populations of macro-invertebrates. Zostera spp. and Ruppia maritima are present. Well-developed salt marshes occur at several locations around the bay. The site includes part of the Strandhill dune system and some areas of wet and dry grassland.
004139	Lough Croan Turlough SPA	Lough Croan turlough is an important site for wintering waterfowl. It regularly supports a nationally important population of Anser albifrons flavirostris which is part of the internationally important River Suck population. It also has nationally important populations of Anas clypeata and Pluvialis apricaria. The Anas clypeata population represents a substantial (>5%) proportion of the all-Ireland total. Other species which occur regularly include Cygnus cygnus Anas crecca Anas acuta and Vanellus vanellus. The turlough also has breeding waterfowl species most notable Anas clypeata and Aythya ferina both rare breeders in Ireland. The wintering waterfowl are monitored annually. Much of the site is a Wildfowl Sanctuary.	Situated approximately 6 km west of the River Suck in Co. Roscommon Lough Croan is a linear wetland aligned north-west/south-east which lies in a flattish area of glacial till. It is split into two main parts - the east functions as a typical turlough with a wet swampy centre the west is a fen floating places which also floods in winter. In between there is undulating ground. Both basins retain some water all year round but there is little overground flow.

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000285	Kilsallagh Bog SAC	Kilsallagh Bog is a small to medium sized raised bog which contains examples of the Annex I habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). although much of the high bog surface has been dried-out somewhat by peripheral cutting and drainage a well-developed raised bog flora exists which includes rarer Sphagnum species such as S. fuscum and S. imbricatum. This site is one of a number of raised bogs in the Ballymoe/Glenamaddy region of east Galway. Together these sites form the largest and most important cluster of relatively intact raised bog sites in the country. Killsallagh Bog supports Lagopus lagopus and Rana temporaria both Red Data book species.	This site is underlain by low permeability fossiliferous limestone bedrock which is overlain by clayey tills. Lake clays were noted at the south of the bog. The bog lies on high ground which forms part of the River Suck catchment. There is a surface catchment divide across the centre of the bog. A portion of the high bog has been afforested within the past 20 years. Part of the cutover bog has been converted to wet or improved grassland.
000566	All Saints Bog and Esker SAC	This site contains good examples of the Annex I priority habitats active raised 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 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.	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 co-incident 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
000580	Mongan Bog SAC	Mongan Bog is an example of a small to medium sized raised bog site which contains examples of the Annex I habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). The centre of the site is dominated by a core of uncut high bog which contains an unusually large number of pools dominated by open water. The uncut high bog core is surrounded by old cutover surface which is regenerating into a mosaic of heath and low scrub. The relatively rare sedge Rhynchospora fusca has been recorded from wet pools within the site. In the past the bog was used by wintering Anser albifrons flavirostris but the geese appear to have deserted the site in recent years. The site supports breeding Numenius arquata and Gallinago gallinago.	The bedrock underlying this site is low permeability fossiliferous limestone. This is overlain by permeable sands and gravels mainly derived from limestone. The peat layer is underlain by relatively impermeable lake clays. Esker ridges of sands and gravels lie to the north and south of the site. Part of the old cutover bog has been converted to improved grassland and this is included in the site for hydrological reasons.
000592	Bellanagare Bog SAC	Bellanagare Bog is the largest remaining raised bog system in the country. The site contains very good examples of the priority Annex I habitat active raised bog and the non-priority habitats degraded raised bog (capable of regeneration) and depressions on peat substrates (Rhynchosporion). It is a rather unusual site in that it is in many ways transitional between raised and blanket bog. Because of the unusual undulating topography of the bog surface the site contains a large number of flushes which occur in areas of surface water movement. The rare plant species Sphagnum pulchrum and Rhynchospora fusca have been recently recorded from wet pools and lawns on the high bog areas.	This bog is underlain by muddy carboniferous limestone with a low permeability. The sub-soils are dominated by clayey limestone till. The site lies on an upland area at the top of a surface catchment divide. The peat is concentrated on ridges with flushes in between.

Site Code	Site Name	Quality of Site	Other Site Characteristics
000604	Derrinea Bog SAC	Derrinea bog is a small raised bog site which contains examples of the Annex I habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). A small area of heath developed over a till mound occurs and this adds to the ecological/geomorphological interest of the site. The site is an example of a western raised bog and although it is rather small in comparison to other raised bog sites in the country the quality of the habitats is good. A number of other raised bogs and calcareous lakes lie in close proximity to this site and together they constitute one of the most important ecological areas in the east Mayo/Roscommon region.	This bog lies in an undulating plateau area of sand and gravel deposits. The area is probably underlain by low permeability fossiliferous limestone which is overlain by highly permeable sandy subsoils. The bog probably developed due to the formation of an impermeable iron pan. There is a till ridge to the south of the site and a drumlin feature to the north-west. A river forms much of the northern and eastern boundary of the site.
000607	Errit Lough SAC	A typical example of the small marl lakes in this region with zonations of Chara beds dependant on exposure and water depth well demonstrated.	A medium sized marl lake part of a series of similar lakes in the upper part of the Boyle River catchment. The lake has exposed stoney shores and some sheltered bays with sparse reedbed development. Surrounding lands are a mixture of pasture grassland raised bog and commercial conifer plantation.
001626	Annaghmore Lough (Roscommon) SAC	The site contains a good example of alkaline fen vegetation. While the extent of the habitat is relatively small it supports a range of typical species including scarce plants such as Eriophorum latifolium and several orchid species. Alkaline fen is nowadays a scarce habitat in Co. Roscommon. A population of Vertigo geyeri has been recorded at this site as recently as 2001. This is the only known location for this rare mollusc in Co. Roscommon and one of the few sites in western Ireland. Annaghmore Lough supports a good diversity of wintering waterfowl with nationally important populations of Anas crecca and Anas clypeata and small numbers of Cygnus cygnus and Pluvialis apricaria. The birds commute to other wetlands in the district.	Annaghmore Lough is located 5 km north-west of Strokestown Co. Roscommon. It lies within a network of small lakes in a rolling drift-covered landscape. The shoreline slopes gently to the lake and these low-lying margins are extensively flooded in winter. In summer when water levels recede substantial areas of this shallow calcareous lake dry out leaving flat expanses of exposed marl. In addition to fen vegetation there are extensive areas of reed swamp and wet grassland around the margins of the lake. A stream exits the lake at the south-east and flows through a low-lying area of wet grassland - this floods regularly and has a turlough character. This site includes a smaller less calcareous lake Lough Nablasbarnagh to the south of Annaghmore. An area of cutover bog is associated with this lake. A small area of limestone pavement adds habitat diversity to the site.

Site Code	Site Name	Quality of Site	Other Site Characteristics
001656	Bricklieve Mountains & Keishcorran SAC	The site is important as it supports a very wide range of habitats. These include limestone cliffs extending 10-30m eutric scree the unusual combination of blanket bog and wet heath on limestone abundant dry heath a variety of grassland types including mineral rich acidic and wet and dry meadows scrub on the cliffs and scattered throughout the grasslands and a small patch of deciduous woodland. The fen at the south-west side of the site is very diverse and unusual in that it occurs as high as 118m. The site includes a fine turlough Lough Gowra at a very high altitude for the habitat(112m). Rare plants at the site include Red Data Book species Draba incana Rorippa islandica Viola persicifolia and Pseudorchis albida as well as the charophyte Chara vulgaris var. papillata and many rare mosses and liverworts. Lough na Leibe holds a good population of Austropotamobius pallipes. The site supports a population of Euphydryas aurinia.	The site is a good example of a karst region and contains many sink holes caves dry valleys and pavements at heights up to 260m. The slopes bounding the Bricklieve Plateau display striking terraces broken by south-eastward trending gullies developed along minor fault-planes. Ecologically the site is extremely diverse and the most interesting features are the presence of peat and acidic grasslands on limestone and the occurrence of a fen at a relatively high altitude of 118 m. The site has many archaeologically interesting megalithic tombs some of considerable size and erected 4500 years ago before peat formed. A system of roads traverse the site and tourism is encouraged.
001976	Lough Gill SAC	An important example of a lake which appears to be naturally eutrophic. Quality generally good though blooms of blue-green algae in recent years indicate some artificial enrichment. Significant areas of alluvial forest occur along the Garvoge River (Osmunda - Salicetum atrocinerea type) and at the mouth of the River Bonet (Carici remotae - Fraxientum type). Old oak woodland of varying quality is well scattered along the shoreline and on some of the islands and is an important example of this habitat for western Ireland. At least six Red Data Book plant species have been recorded from site. Site has three species of lamprey and Austropotamobius pallipes. The lake and its associated rivers support an important population of Salmo salar. Lutra lutra has a good population within the site. Of minor importance for birds though the site has a small breeding colony of Sterna hirundo.	Lough Gill is a moderate to large sized lake lying immediately east of Sligo town. It is fed by the River Bonet and drains into the sea via the Garvogue River a short wide and slow flowing river which passes through Sligo town. The lake lies along the junction between old metamorphic rocks to the south and limestone to the north. The water of the lake is thus influenced by both acidic and alkaline inputs although nearly all the basin lies over limestone. The lake is 8 km by 2-3 km and has an area of 1400 ha. It is a deep lake with maximum depth at 31 m. Islands are a feature of the lake. Much of the shoreline is wooded and there is also some swamp vegetation wet grassland and scrub along the shoreline. The lake is an important salmonid and coarse fishery and is used for a range of recreational activities. The site also includes the Shanvans and Owenmore rivers.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		A wide range of rare or scarce invertebrates are known from the site as well as several Red Data Book mammal species including Martes martes.	
002202	Mount Jessop Bog SAC	Mount Jessop Bog cSAC 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 (7120) Degraded Raised Bog (capable of regeneration) which is being restored to the priority Annex 1 habitat Active Raised Bog (7110) and a small area of the Annex 1 priority habitat Bog Woodland (91D0) which is developing on the cutover. 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. 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. 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 Mount Jessop Bog NHA (001450) the conservation management of which should support the redevelopment of Active raised bog and Bog Woodland in the SAC.	Mount Jessop Bog SAC (002202) comprises 71.91 ha of raised bog (25.7 ha of high bog and 46.21 ha cutover) which occupies the south-eastern section of Mount Jessop Bog NHA (001450). Mount Jessop Bog NHA is a small Midland raised bog developed in a basin and surrounded by areas of higher mineral ground. The original area of the bog in the early 1800s was 195.8 ha but due to domestic turf cutting the high bog area in 2010 was 65.8 ha. The SAC is bordered by raised bog and cutover to the west and north and agricultural grassland to the east and south. Within the SAC approximately 31 ha (44%) both high bog and cutover was afforested with conifer plantations between 1973 and 1975. Only 11% (8.0 ha) remained open high bog. The remainder of the cutover developed either into birch and willow scrub (19.5 ha) or remained open areas (12.5 ha) dominated by heath and bog species especially those adjacent to the former turf cutting areas in the south east of the site which were being used as spread grounds. Turf cutting has not been observed on this site since the project commenced. On the remaining area of open high bog much of the vegetation is typical of Midland Raised Bog type. Some small hummocks of S. austinii and S. fuscum (s.l.) occur. In places Sphagnum hummocks supports the Midland raised bog indicator species Bog Rosemary (Andromeda polifolia) and Cranberry (Vaccinium oxycoccos). There is also a record of the liverwort Pleurozia purpurea in the NHA. This is one of the Western raised bog indicators suggesting that this bog has transitional features between the two types of raised bog in Ireland. Lodgepole Pine (Pinus contorta) which is invading the open bog is being controlled as part of the restoration plan for the site.

Site Code	Site Name	Quality of Site	Other Site Characteristics
			The conifer plantations were felled and the intensive drainage system associated with the plantations were blocked by 2013 as part of an EU funded LIFE project so as to raise the water table and restore Active Raised Bog on the site. Prior to the felling there were relatively few bog species present in the plantations except along fire breaks and at plantation margins. With the clear-felling and blocking of drains there are indications that the high bog is re-wetting and water-levels in some areas now remain high throughout most of the year. Limited areas of wet flats and hollows are developing and more typical raised bog vegetation has returned. However the majority of the restored areas have not yet developed vegetation characteristic of the wet bog. Two areas covering 1.14 ha in the northern and western sections of the SAC have been identified by hydrological modelling and ground survey as Degraded raised bog (7120) habitat and are showing significant indications of recovery. The main areas are on the open bog to the west of the formerly afforested area and in the north west of the clear-felled area. These areas now have standing surface water in the hollows and pools for most of the year and considerable areas of regenerating Sphagnum species. It is considered that these areas will support some areas of Active raised bog within 10-20 years and that this habitat will continue to develop and spread over the following decades. In addition an area of developing Bog Woodland (91D0) (0.23 ha) exists on cutover in the south east of the site. This is expected to mature and develop further over time as the cutover rewets fully. It is also expected that 0.29 additional hectares of very wet clear-fell on cutover adjacent to the Bog Woodland will develop into Active Raised Bog in the medium to long term. Finally it is estimated that restoration works carried out on this site will benefit the conservation of 2 ha of Active raised bog and 0.25 ha Degraded Raised Bog in the adjacent area of Mount Jessop Bog NHA (001450).

Site Code	Site Name	Quality of Site	Other Site Characteristics
			It is also expected that Wet Birch woodland will develop within 8.82 ha of very wet clear-fell on cutover adjacent to the Bog Woodland in the medium to long term. Some of it may develop into additional Bog Woodland (91D0) areas.
002214	Killeglan Grassland SAC	Species rich calcareous grassland covers 81% of the site and in places forms a mosaic with scrub and shattered limestone outcrops. Grazing intensity is low although agricultural reclamation has seen the demise of some areas of the site in recent years. The site is one of the most important sites in Ireland for the legally protected species of orchid orchis morio (Flora Protection Order 1987).	The underlying geology of the site is Lower Carboniferous Limestone overlain by thin rendzina soils. The topography is undulating and there are many outcropping limestone boulders.
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 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.	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. 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.
002347	Camderry Bog SAC	Camderry Bog is one of the larger raised bog sites in east Galway (281 ha). Although there is a large area of high bog present most of this is in a relatively dry state at present because of peripheral peat cutting and burning and is classified as degraded. A few small active areas of bog growth occur with the largest in the south-western corner of the site.	Camderry Bog is a relatively large raised bog site which lies 12 km north-east of Mountbellew in east Co. Galway. The bog overlies Carboniferous limestone bedrock which is covered by a clayey/stoney limestone till. The bog has developed in interdrumlin depressions and a small low drumlin runs through a section of the site separating the main lobe from the south lobe.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		Rhynchosporion vegetation is present but is not considered to be particularly well represented. Despite the dry nature of the site two of the rarer Sphagnum species S. fuscum and S. imbricatum still occur in some quantity. Lagopus lagopus a Red listed species in Ireland has been recorded.	A large proportion of the site (c.70%) comprises uncut high bog. However c.10% of this high bog area is afforested with conifers. Cutover bog some with scrub and wet grassland occur around the margins of the high bog.
002354	Tullaghanrock Bog SAC	This site while relatively small in size is an important raised bog complex and is of particular note as it occurs at the north-western limit of raised bog distribution in the Republic of Ireland. The site displays good examples of active raised bog degraded raised bog and Rhynchosporion vegetation. There has been relatively low levels of disturbance in the past and thus the bog is one of the best preserved in the country at present. Of particular note are the near-natural vegetation transitions from bog to river along the eastern margins of the site.	Tullaghanrock bog is a small raised bog situated 2 km north-east of Ballaghadereen village Co. Roscommon. The site lies between a disused railway line and the Lung river and as a result of the difficult access the site is relatively undisturbed and intact. Most of the site comprises uncut high bog which is surrounded by a narrow fringe of cutover bog. Part of the cutover has been converted to pasture grassland of varying quality. Small areas of coniferous forestry occur both within and along the margins of the site.
004017	Mongan Bog SPA	Site is an important example of a relatively intact midland raised bog. Has been used as a feeding and roost site by part of the River Suck population of Anser flavirostris albifrons. Appears to be seldom used nowadays which probably reflects a trend in recent years away from usage of raised bog sites. Supports breeding Gallinago gallinago and probably Numenius arquata. An important site for invertebrates with several rare species recorded. Mongan is one of the most studied raised bog sites in the country.	Mongan Bog is a relatively intact raised bog situated close to Clonmacnoise and the Shannon callows. The surface is noticeably wet with a well developed hummock-hollow topography. The peat layer is underlain by relatively impermeable lake clays bog which overlie permeable sands and gravels mainly derived from limestone. The underlying geology is low permeability fossiliferous limestone. The peat basin is surrounded by esker ridges to the north and south.
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.	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.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		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 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.
004101	Ballykenny-Fisherstown Bog SPA	This site has important examples of several habitats listed on Annex I of the EU Directive notably active raised bog degraded raised bog naturally eutrophic lakes and old oak woodlands. The lake and callow grasslands provide good habitat for a range of wintering waterfowl species including regionally important flocks of Cygnus cygnus Anas crecca and Anas penelope. Species such as Phalacrocorax carbo and Aythya fuligula are also represented but in low numbers. The bogs were formerly used by wintering Anser albifrons flavirostris but these appear to have been now abandoned in favour of grassland sites elsewhere. Falco columbarius has been recorded and may breed in the site. Lagopus lagopus occurs on the bogs.	Site is situated in the north central midlands overlying Carboniferous limestone. Lough Forbes is a naturally eutrophic lake on the Shannon system and is fed also from the north by the River Rinn. The lake has well developed swamp vegetation and displays natural transition to seasonally flooded grassland marsh and raised bog. The raised bogs known as the Ballykenny-Fishertown complex are separated by the Camlin River which has further areas of callow grassland. The Castle Forbes estate on the eastern shore of the lake is extensively planted with mature semi-natural woodland including some stands of old oak.
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.	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.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		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 season and probably nests. The site supports several rare invertebrate species and the esker ridge supports three Red Data plant species.	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.
004105	Bellanagare Bog SPA	Bellanagare bog shows good examples of the Annex I habitats active raised bog degraded raised bog and Rhynchosporian vegetation. In the past the bog was used by wintering Anser albifrons flavirostris from the population that is centred on Lough Gara. However the geese now feed mainly on intensively managed grassland and seldom use the bogs in the area. The bog may have been used by nesting Pluvialis apricaria in the past and is occasionally used by wintering birds. There is a good population of Lagopus lagopus at the site. Other typical bog fauna includes Rana temporaria and Lepus timidus hibernicus.	Bellanagare Bog is a large raised bog complex situated 6 km north-north-east of Castlerea. Due to its western location it shows characters of blanket bog habitat and is classified as an intermediate raised bog. The site which is underlain by muddy carboniferous limestone lies on an upland area at the top of a surface catchment divide. The peat is concentrated on ridges with flushes in between. A number of streams including the Frances River rise on the site.

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
000216	River Shannon Callows SAC	Alkaline fens [7230], Limestone pavements [8240], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Otter (Lutra lutra) [1355]	J02.01, B06, A08, A07, D01.01, G01, J02.04.01, A04.03, A03.03, A10.01, A03, K03.04, J02.05, F03.01, J02.05.02, B02.02, G05.01, A04.01, A04.02.05, C01.03.02, J02.11	Landfill, land reclamation and drying out, general, Grazing in forests or woodland, Fertilisation, Use of biocides, hormones and chemicals, Paths, tracks, cycling tracks, Outdoor sports and leisure activities, recreational activities, Flooding, Abandonment of pastoral systems lack of grazing, Abandonment or lack of mowing , Removal of hedges and copses or scrub, Mowing or cutting of grassland, Predation, Modification of hydrographic functioning, general, Hunting, Modifying structures of inland water courses, Forestry clearance, Trampling, overuse, Intensive grazing, Non intensive mixed animal grazing, Mechanical removal of peat, Siltation rate changes, dumping, depositing of dredged deposits
000218	Coolcam Turlough SAC	Turloughs [3180]	A10, C01.01.01, A08, X, A04.01.05, A02.01	Restructuring agricultural land holding, Sand and gravel quarries, Fertilisation, No threats or pressures, Intensive mixed animal grazing, Agricultural intensification
000255	Croaghill Turlough SAC	Turloughs [3180]	A08, A04.02.05, C01.01.01, A05.02, A03.02, X	Fertilisation, Non intensive mixed animal grazing, Sand and gravel quarries, Stock feeding, Non intensive mowing, No threats or pressures
000268	Galway Bay Complex SAC	Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Mediterranean salt meadows (Juncetalia maritimi) [1410], Large shallow inlets and bays [1160], Alkaline fens [7230], Perennial vegetation of stony banks [1220], Coastal lagoons [1150], Limestone pavements [8240], Calcareous fens with Cladium mariscus and species of the Caricion	G01.01.02, H01.05, E03.03, D03.01.01, D01.01, F02.03.01, D02.02, I01, F06, G02.01, J02.01.02, D03.01.04, H01.08, J02.05.01, C01.01.02, J02.12.01, A04.02.01,	Non-motorized nautical sports, Diffuse pollution to surface waters due to agricultural and forestry activities, Disposal of inert materials, Slipways, Paths, tracks, cycling tracks, Bait digging or collection, Pipe lines, Invasive non-native species, Hunting, fishing or collecting activities not referred to above, Golf course, Reclamation of land from sea, estuary or marsh, Industrial ports, Diffuse pollution to surface waters due to household sewage and waste waters, Modification of water flow (tidal & marine currents), Removal of beach materials, Sea defence or coast protection works, tidal barrages, Non intensive cattle grazing, Estuarine and coastal dredging, Non intensive sheep grazing, Sand and gravel extraction ,

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		davallianae [7210], Reefs [1170], Otter (Lutra lutra) [1355], Juniperus communis formations on heaths or calcareous grasslands [5130], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Harbour seal (Phoca vitulina) [1365], Turloughs [3180]	J02.02.02, A04.02.02, C01.01, D03, F01, A02.01	Shipping lanes, ports, marine constructions, Marine and Freshwater Aquaculture, Agricultural intensification
000285	Kilsallagh 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, J02.07, B02.02, J01.01, C01.03.02, A04.02.01, J02.08	Other human induced changes in hydraulic conditions, Water abstractions from groundwater, Forestry clearance, Burning down, Mechanical removal of peat, Non intensive cattle grazing, Raising the groundwater table or artificial recharge of groundwater
000295	Levally Lough SAC	Turloughs [3180]	E01.03, C01.01.01, F03.01, X, A10, A08	Dispersed habitation, Sand and gravel quarries, Hunting, No threats or pressures, Restructuring agricultural land holding, Fertilisation
000296	Lisnageeragh Bog and Ballinastack Turlough SAC	Degraded raised bogs still capable of natural regeneration [7120], Turloughs [3180], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	I02, A08, A04.01.01, A02.01, J02.15, J01.01, B02.02, C01.03.02, I01, D02.01	Problematic native species, Fertilisation, Intensive cattle grazing, Agricultural intensification, Other human induced changes in hydraulic conditions, Burning down, Forestry clearance, Mechanical removal of peat, Invasive non-native species, Electricity and phone lines
000297	Lough Corrib SAC	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Lesser horseshoe bat (Rhinolophus hipposideros) [1303], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], Slender naiad (Najas flexilis) [1833], Degraded raised bogs still capable of natural regeneration [7120], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea	I01, C01.01, H01.08, C01.03.02, E03.01, D03.01.02, G05, A10.01, E01.01, J02.01.03, J02.15, B01, A04, A04.03, A08, A02.01, E01.03, D01	Invasive non-native species, Sand and gravel extraction , Diffuse pollution to surface waters due to household sewage and waste waters, Mechanical removal of peat, Disposal of household or recreational facility waste, Piers or tourist harbours or recreational piers, Other human intrusions and disturbances , Removal of hedges and copses or scrub, Continuous urbanisation, Infilling of ditches, dykes, ponds, pools, marshes or pits, Other human induced changes in hydraulic conditions, Forest planting on open ground, Grazing, Abandonment of pastoral systems lack of grazing, Fertilisation,

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		uniflorae and/or Isoeto-Nanojuncetea [3130], White-clawed crayfish (Austropotamobius pallipes) [1092], Otter (Lutra lutra) [1355], Slender green feather-moss (Hamatocaulis vernicosus) [6216], Sea lamprey (Petromyzon marinus) [1095], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Atlantic salmon (Salmo salar) [1106], Bog woodland [91D0], Petrifying springs with tufa formation (Cratoneurion) [7220], Brook lamprey (Lampetra planeri) [1096], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Limestone pavements [8240], Active raised bogs [7110], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Depressions on peat substrates of the Rhynchosporion [7150], Alkaline fens [7230]		Agricultural intensification, Dispersed habitation, Roads, paths and railroads
000301	Lough Lurgeen Bog/Glenamaddy Turlough SAC	Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation [3270], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Turloughs [3180], Active raised bogs [7110]	A04.02.02, X, F03.01, J01.01, A03.03, H01.08, D02.01, J02.07, C01.03.02, H02.07, J02.15, A08	Non intensive sheep grazing, No threats or pressures, Hunting, Burning down, Abandonment or lack of mowing, Diffuse pollution to surface waters due to household sewage and waste waters, Electricity and phone lines, Water abstractions from groundwater, Mechanical removal of peat, Diffuse groundwater pollution due to non-sewered population, Other human induced changes in hydraulic conditions, Fertilisation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000326	Shankill West Bog SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	A08, A10, A04.01.01, C01.03.02, J01.01, X, J02.07	Fertilisation, Restructuring agricultural land holding, Intensive cattle grazing, Mechanical removal of peat, Burning down, No threats or pressures, Water abstractions from groundwater
000440	Lough Ree SAC	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], Bog woodland [91D0], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Otter (Lutra lutra) [1355], Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], Active raised bogs [7110], Limestone pavements [8240], Alkaline fens [7230]	H02.06, G01.01, F03.01, K03.05, A03.03, G02.09, G01.02, H06.03, B02, E01.03, I01, A08, A04, L08, F02.03, H01.08, D03.01.02, J02.11.02, J02.04	Diffuse groundwater pollution due to agricultural and forestry activities, Nautical sports, Hunting, Antagonism arising from introduction of species, Abandonment or lack of mowing , Wildlife watching, Walking, horseriding and non-motorised vehicles, Thermal heating of water bodies, Forest and Plantation management & use, Dispersed habitation, Invasive non-native species, Fertilisation, Grazing, Inundation (natural processes), Leisure fishing, Diffuse pollution to surface waters due to household sewage and waste waters, Piers or tourist harbours or recreational piers, Other siltation rate changes, Flooding modifications
000448	Fortwilliam Turlough SAC	Turloughs [3180]	J02.07.02, G02.09, A04.01.01, H02.06, J02.07.01	Groundwater abstractions for public water supply, Wildlife watching, Intensive cattle grazing, Diffuse groundwater pollution due to agricultural and forestry activities, Groundwater abstractions for agriculture
000458	Killala Bay/Moy Estuary SAC	Sea lamprey (Petromyzon marinus) [1095], Humid dune slacks [2190], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Salicornia and other annuals colonising mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140], Embryonic shifting dunes [2110], Estuaries [1130], Harbour seal (Phoca vitulina) [1365], Narrow-mouthed whorl snail (Vertigo angustior) [1014], Annual vegetation of drift	F02.03, G02.02, H01.08, G01.02, G02.08, E01, J02.04, M01.03	Leisure fishing, Skiing complex, Diffuse pollution to surface waters due to household sewage and waste waters, Walking, horseriding and non-motorised vehicles, Camping and caravans, Urbanised areas, human habitation, Flooding modifications, Flooding and rising precipitations

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		lines [1210], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120]		
000492	Doocastle Turlough SAC	Turloughs [3180]	F03.01, A08, A04	Hunting, Fertilisation, Grazing
000497	Flughany Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	A10, A04, D05, A08, C01.03, D01.02	Restructuring agricultural land holding, Grazing, Improved access to site, Fertilisation, Peat extraction, Roads, motorways
000566	All Saints Bog and Esker SAC	Active raised bogs [7110], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0]	C01.03, A08, E05, J02.15, J02.10, A04, A05.02, E03.03, E03.01, C01.01, J01.01	Peat extraction, Fertilisation, Storage of materials, Other human induced changes in hydraulic conditions, Management of aquatic and bank vegetation for drainage purposes, Grazing, Stock feeding, Disposal of inert materials, Disposal of household or recreational facility waste, Sand and gravel extraction, Burning down
000575	Ferbane Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	J01.01, X, B03, E03.01, J02.15, A02.01, A10, A08, K02.01, E03.03, C01.03, C01.01	Burning down, No threats or pressures, Forest exploitation without replanting or natural regrowth, Disposal of household or recreational facility waste, Other human induced changes in hydraulic conditions, Agricultural intensification, Restructuring agricultural land holding, Fertilisation, Species composition change (succession), Disposal of inert materials, Peat extraction, Sand and gravel extraction
000576	Fin Lough (Offaly) SAC	Alkaline fens [7230], Geyer`s whorl snail (Vertigo geyeri) [1013]	A04.03, K01.03, E03.03, K02, E03.01, X, J01.01, F03.01, J02.10, K01.02	Abandonment of pastoral systems lack of grazing, Drying out, Disposal of inert materials, Biocenotic evolution, succession, Disposal of household or recreational facility waste, No threats or pressures, Burning down, Hunting, Management of aquatic and bank vegetation for drainage purposes, Silting up

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000580	Mongan Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	X, A05.02, F03.01, A08, E03.03, C01.03, E03.01, J01.01, J02.15	No threats or pressures, Stock feeding, Hunting, Fertilisation, Disposal of inert materials, Peat extraction, Disposal of household or recreational facility waste, Burning down, Other human induced changes in hydraulic conditions
000581	Moyclare Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	F03.01, E03.03, C01.03, J02.15, A07, X, J01.01, E03.01, A04.01.04	Hunting, Disposal of inert materials, Peat extraction, Other human induced changes in hydraulic conditions, Use of biocides, hormones and chemicals, No threats or pressures, Burning down, Disposal of household or recreational facility waste, Intensive goat grazing
000584	Cuilcagh - Anierin Uplands SAC	European dry heaths [4030], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Petrifying springs with tufa formation (Cratoneurion) [7220], Transition mires and quaking bogs [7140], Natural dystrophic lakes and ponds [3160], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], Siliceous rocky slopes with chasmophytic vegetation [8220], Alpine and Boreal heaths [4060], Northern Atlantic wet heaths with Erica tetralix [4010], Slender green feather-moss (Hamatocaulis vernicosus) [6216], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230], Blanket bogs * if active bog [7130]	A01, G01.02, D01.02, A04.02.03, A07, G01.03.02, B02.01, G05.09, J01, H05.01, B, A04.01.02, C01.03, G05.01, B01.02, F03.02.02, D01.01, I02, H01.05, K01.01, G05.07, A04.01.03	Cultivation, Walking, horseriding and non-motorised vehicles, Roads, motorways, Non intensive horse grazing, Use of biocides, hormones and chemicals, Off-road motorized driving, Forest replanting, Fences, fencing, Fire and fire suppression, Garbage and solid waste, Sylviculture, forestry, Intensive sheep grazing, Peat extraction, Trampling, overuse, Artificial planting on open ground (non-native trees), Taking from nest (e.g. falcons), Paths, tracks, cycling tracks, Problematic native species, Diffuse pollution to surface waters due to agricultural and forestry activities, Erosion, Missing or wrongly directed conservation measures, Intensive horse grazing
000588	Ballinturly Turlough SAC	Turloughs [3180]	X, F03.01, A08	No threats or pressures, Hunting, Fertilisation
000592	Bellanagare Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	X, E03.01, C01.03.02, J02.05, I01	No threats or pressures, Disposal of household or recreational facility waste, Mechanical removal of peat, Modification of hydrographic functioning, general, Invasive non-native species

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000595	Callow Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	J01.01, X, J02.15, C01.03.02, B, J02.04	Burning down, No threats or pressures, Other human induced changes in hydraulic conditions, Mechanical removal of peat, Sylviculture, forestry, Flooding modifications
000597	Carrowbehy/Caher Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	E03.01, B02.02, A04, I01, J02.05	Disposal of household or recreational facility waste, Forestry clearance, Grazing, Invasive non-native species, Modification of hydrographic functioning, general
000600	Cloonchambers Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	J02.05, I01, C01.03.02, E03.01, A04	Modification of hydrographic functioning, general, Invasive non-native species, Mechanical removal of peat, Disposal of household or recreational facility waste, Grazing
000604	Derrinea Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	I01, J02.05, A04, E03.01	Invasive non-native species, Modification of hydrographic functioning, general, Grazing, Disposal of household or recreational facility waste
000607	Errit Lough SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	X, G05	No threats or pressures, Other human intrusions and disturbances
000609	Lisduff Turlough SAC	Turloughs [3180]	A08, G05, A04	Fertilisation, Other human intrusions and disturbances, Grazing
000610	Lough Croan Turlough SAC	Turloughs [3180]	F03.02.04, A04, A05.02	Predator control, Grazing, Stock feeding
000611	Lough Funshinagh SAC	Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation [3270], Turloughs [3180]	F03.02.04, D01.01, A05.02, A08	Predator control, Paths, tracks, cycling tracks, Stock feeding, Fertilisation
000612	Mullygollan Turlough SAC	Turloughs [3180]	A08, A04, F03.01	Fertilisation, Grazing, Hunting

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000614	Cloonshanville Bog SAC	Bog woodland [91D0], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	J02.04, B, X, C01.03.02	Flooding modifications, Sylviculture, forestry, No threats or pressures, Mechanical removal of peat
000622	Ballysadare Bay SAC	Estuaries [1130], Mudflats and sandflats not covered by seawater at low tide [1140], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Humid dune slacks [2190], Harbour seal (Phoca vitulina) [1365], Narrow-mouthed Whorl Snail (Vertigo angustior) [1014], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Embryonic shifting dunes [2110]	J02.12.01, K01.01, E01.02, F01.03, F02, I01, G01.02, G02.01, G05.01, J02.01.02, A04.03	Sea defence or coast protection works, tidal barrages, Erosion, Discontinuous urbanisation, Bottom culture, Fishing and harvesting aquatic resources, Invasive non-native species, Walking, horseriding and non-motorised vehicles, Golf course, Trampling, overuse, Reclamation of land from sea, estuary or marsh, Abandonment of pastoral systems lack of grazing
000636	Templehouse and Cloonacleigha Loughs SAC	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	K02.01, A04.02.01, C01.03.02, I01, J02.02.01, B02	Species composition change (succession), Non intensive cattle grazing, Mechanical removal of peat, Invasive non-native species, Dredging or removal of limnic sediments, Forest and Plantation management & use
000637	Turloughmore (Sligo) SAC	Turloughs [3180]	K02, A02.01, B02.01, X	Biocenotic evolution, succession, Agricultural intensification, Forest replanting, No threats or pressures
001242	Carrownagappul Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	J02.15, J01.01, F06.01, J02.08, J02.07	Other human induced changes in hydraulic conditions, Burning down, Game or bird breeding station, Raising the groundwater table or artificial recharge of groundwater, Water abstractions from groundwater
001571	Urlaur Lakes SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	E03.01, D01.02, J02, C01.03.02, E01.03, A04, A08, F02.03, C01.03.01	Disposal of household or recreational facility waste, Roads, motorways, Human induced changes in hydraulic conditions, Mechanical removal of peat, Dispersed habitation, Grazing, Fertilisation, Leisure fishing, Hand cutting of peat
001625	Castlesampson Esker SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Turloughs [3180]	A10.01, A04, C01.03.01, C01.01	Removal of hedges and copses or scrub, Grazing, Hand cutting of peat, Sand and gravel extraction

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001626	Annaghmore Lough (Roscommon) SAC	Alkaline fens [7230], Geyer`s whorl snail (Vertigo geyeri) [1013]	A04.02.01, J01, A02, A04.03	Non intensive cattle grazing, Fire and fire suppression, Modification of cultivation practices, Abandonment of pastoral systems lack of grazing
001637	Four Roads Turlough SAC	Turloughs [3180]	A05.02, A04	Stock feeding, Grazing
001656	Bricklieve Mountains & Keishcorran SAC	White-clawed crayfish (Austropotamobius pallipes) [1092], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Marsh Fritillary (Euphydryas aurinia) [1065], Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) [8120], Turloughs [3180], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510]	C01.03.02, A10.01, F06, A04.01.02, D01.01, A04.02.01, J01.01, A10, A02.01	Mechanical removal of peat, Removal of hedges and copses or scrub, Hunting, fishing or collecting activities not referred to above, Intensive sheep grazing, Paths, tracks, cycling tracks, Non intensive cattle grazing, Burning down, Restructuring agricultural land holding, Agricultural intensification
001673	Lough Arrow SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	J02.01.03, G02, X, I01, A10.01, D03.01.02	Infilling of ditches, dykes, ponds, pools, marshes or pits, Sport and leisure structures, No threats or pressures, Invasive non-native species, Removal of hedges and copses or scrub, Piers or tourist harbours or recreational piers
001776	Pilgrim's Road Esker SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	D01, E03.03, A04.03, A10.01, A07, A05.02, A02.01, A08, A04.01, K02.01	Roads, paths and railroads, Disposal of inert materials, Abandonment of pastoral systems lack of grazing, Removal of hedges and copses or scrub, Use of biocides, hormones and chemicals, Stock feeding, Agricultural intensification, Fertilisation, Intensive grazing, Species composition change (succession)
001818	Lough Forbes Complex SAC	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion,	H02.06, A04.03, A03.03, A03.02, G02.09, F02.03, F03.01, I01, J02.15, J02.07.02	Diffuse groundwater pollution due to agricultural and forestry activities, Abandonment of pastoral systems lack of grazing, Abandonment or lack of mowing, Non intensive mowing, Wildlife watching, Leisure fishing, Hunting, Invasive non-native species,

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		Alnion incanae, Salicion albae) [91E0], Depressions on peat substrates of the Rhynchosporion [7150]		Other human induced changes in hydraulic conditions, Groundwater abstractions for public water supply
001898	Unshin River SAC	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Atlantic salmon (Salmo salar) [1106], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Otter (Lutra lutra) [1355]	A02.01, J02.10, B02, A04.02.02, I01	Agricultural intensification, Management of aquatic and bank vegetation for drainage purposes, Forest and Plantation management & use, Non intensive sheep grazing, Invasive non-native species
001899	Cloonakillina Lough SAC	Transition mires and quaking bogs [7140]	J01, A03, A04, F02.03, B	Fire and fire suppression, Mowing or cutting of grassland, Grazing, Leisure fishing, Sylviculture, forestry
001976	Lough Gill SAC	River lamprey (Lampetra fluviatilis) [1099], Otter (Lutra lutra) [1355], Atlantic salmon (Salmo salar) [1106], Sea lamprey (Petromyzon marinus) [1095], Brook lamprey (Lampetra planeri) [1096], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], White-clawed crayfish (Austropotamobius pallipes) [1092], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]	B, J02.10, D01.01, J02.05.02, G01.01.01, I01, A10.01, E01.03, E03.03, E01.01, X, B06	Sylviculture, forestry, Management of aquatic and bank vegetation for drainage purposes, Paths, tracks, cycling tracks, Modifying structures of inland water courses, Motorized nautical sports, Invasive non-native species, Removal of hedges and copses or scrub, Dispersed habitation, Disposal of inert materials, Continuous urbanisation, No threats or pressures, Grazing in forests or woodland

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002032	Boleybrack Mountain SAC	Northern Atlantic wet heaths with Erica tetralix [4010], European dry heaths [4030], Natural dystrophic lakes and ponds [3160], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Blanket bogs * if active bog [7130]	D02.02, J01.01, B, B01, C03.03, F03.02.04, A07, A04.01.02, C01.01.01, K03.02, A04.02.02, J02.06.02, A04.03, F03.02.02, C01.03.02, A04.02.01, I02, G01.02, D01, B02, A10	Pipe lines, Burning down, Sylviculture, forestry, Forest planting on open ground, Wind energy production, Predator control, Use of biocides, hormones and chemicals, Intensive sheep grazing, Sand and gravel quarries, Parasitism (fauna), Non intensive sheep grazing, Surface water abstractions for public water supply, Abandonment of pastoral systems lack of grazing, Taking from nest (e.g. falcons), Mechanical removal of peat, Non intensive cattle grazing, Problematic native species, Walking, horseriding and non-motorised vehicles, Roads, paths and railroads, Forest and Plantation management & use, Restructuring agricultural land holding
002110	Corliskea/Trien/ Cloonfelliv Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0], Active raised bogs [7110]	A04.02.01, A04, J02.15, X, A10, J02.07, C01.03.02, J01.01	Non intensive cattle grazing, Grazing, Other human induced changes in hydraulic conditions, No threats or pressures, Restructuring agricultural land holding, Water abstractions from groundwater, Mechanical removal of peat, Burning down
002165	Lower River Shannon SAC	Mudflats and sandflats not covered by seawater at low tide [1140], Sea lamprey (Petromyzon marinus) [1095], Salicornia and other annuals colonising mud and sand [1310], Otter (Lutra lutra) [1355], Atlantic salmon (Salmo salar) [1106], Mediterranean salt meadows (Juncetalia maritimi) [1410], Sandbanks which are slightly covered by sea water all the time [1110], Reefs [1170], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Brook lamprey (Lampetra planeri) [1096], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], River lamprey (Lampetra fluviatilis) [1099], Coastal lagoons	F01, H04, E01, D01.01, G01.01, I01, J02.12.01, E03, F02.03, J02.01.01, A08, K02.03, B, F03.01, J02.01.02, C01.03.01, C01.01.02, A04, J02.10	Marine and Freshwater Aquaculture, Air pollution, air-borne pollutants, Urbanised areas, human habitation, Paths, tracks, cycling tracks, Nautical sports, Invasive non-native species, Sea defence or coast protection works, tidal barrages, Discharges, Leisure fishing, Polderisation, Fertilisation, Eutrophication (natural), Sylviculture, forestry, Hunting, Reclamation of land from sea, estuary or marsh, Hand cutting of peat, Removal of beach materials, Grazing, Management of aquatic and bank vegetation for drainage purposes

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		[1150], Perennial vegetation of stony banks [1220], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Bottlenose dolphin (Tursiops truncatus) [1349], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Estuaries [1130], Large shallow inlets and bays [1160]		
002199	Ballygar (Aghrane) Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	B02.02, J01.01, J02.15, I01, I02	Forestry clearance, Burning down, Other human induced changes in hydraulic conditions, Invasive non-native species, Problematic native species
002200	Aughrim (Aghrane) Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	I01, B02.02, J01.02, I02, J01.01, J02.15	Invasive non-native species, Forestry clearance, Suppression of natural fires, Problematic native species, Burning down, Other human induced changes in hydraulic conditions
002202	Mount Jessop Bog SAC	Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120]	J02.15, B02.02, I02, J01.01, I01	Other human induced changes in hydraulic conditions, Forestry clearance, Problematic native species, Burning down, Invasive non-native species
002213	Glenloughaun Esker SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04, I02, A04.03, A08, B01.01, C01.01, A02.01, A04.01.03	Grazing, Problematic native species, Abandonment of pastoral systems lack of grazing, Fertilisation, Forest planting on open ground (native trees), Sand and gravel extraction, Agricultural intensification, Intensive horse grazing
002214	Killeglan Grassland SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04.01.02, J02.01, A04	Intensive sheep grazing, Landfill, land reclamation and drying out, general, Grazing
002241	Lough Derg, North-East Shore SAC	Taxus baccata woods of the British Isles [91J0], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Juniperus communis formations on heaths or calcareous grasslands [5130], Alkaline fens	M01.03, H01, A04.02.05, A10.01, J02.10, G02.09, D03.01.02,	Flooding and rising precipitations, Pollution to surface waters (limnic & terrestrial, marine & brackish), Non intensive mixed animal grazing, Removal of hedges and copses or scrub, Management of aquatic and bank vegetation for drainage purposes, Wildlife watching, Piers or tourist harbours or recreational piers,

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		[7230], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Limestone pavements [8240]	M01.01, J02.01.03, A08, J02, I01, A04.01, B02.01.01, C01, I02, M01.02, G01, H01.08, K02.03, D01.01, K02.01	Temperature changes (e.g. rise of temperature & extremes), Infilling of ditches, dykes, ponds, pools, marshes or pits, Fertilisation, Human induced changes in hydraulic conditions, Invasive non-native species, Intensive grazing, Forest replanting (native trees), Mining and quarrying, Problematic native species, Droughts and less precipitations, Outdoor sports and leisure activities, recreational activities, Diffuse pollution to surface waters due to household sewage and waste waters, Eutrophication (natural), Paths, tracks, cycling tracks, Species composition change (succession)
002296	Williamstown Turloughs SAC	Turloughs [3180]	C01.03.02, H01.05, J02.15, C01.01.01, J02.07, H02.07, E01, X, A10	Mechanical removal of peat, Diffuse pollution to surface waters due to agricultural and forestry activities, Other human induced changes in hydraulic conditions, Sand and gravel quarries, Water abstractions from groundwater, Diffuse groundwater pollution due to non-sewered population, Urbanised areas, human habitation, No threats or pressures, Restructuring agricultural land holding
002298	River Moy SAC	Alkaline fens [7230], Active raised bogs [7110], White-clawed crayfish (Austropotamobius pallipes) [1092], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Degraded raised bogs still capable of natural regeneration [7120], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Atlantic salmon (Salmo salar) [1106], Brook lamprey (Lampetra planeri) [1096], Depressions on peat substrates of the Rhynchosporion [7150], Sea lamprey (Petromyzon marinus) [1095], Otter (Lutra lutra) [1355]	D04.02, B01, B05, H01.05, A02.01, F02.03, F03.02.04, J02.04, C01.03, F03.02, I01	Aerodrome, heliport, Forest planting on open ground, Use of fertilizers (forestry), Diffuse pollution to surface waters due to agricultural and forestry activities, Agricultural intensification, Leisure fishing, Predator control, Flooding modifications, Peat extraction, Taking and removal of animals (terrestrial), Invasive non-native species

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002336	Carn Park Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	I03, D01.01, I01, C01.03.02, B02.02, J02.01, J02.05	Introduced genetic material, GMO, Paths, tracks, cycling tracks, Invasive non-native species, Mechanical removal of peat, Forestry clearance, Landfill, land reclamation and drying out, general, Modification of hydrographic functioning, general
002337	Crosswood Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	B02.02, J01, J02.05, I03, J02.01, C01.03.02, D01.01, I01, A05.02, E03.01	Forestry clearance, Fire and fire suppression, Modification of hydrographic functioning, general, Introduced genetic material, GMO, Landfill, land reclamation and drying out, general, Mechanical removal of peat, Paths, tracks, cycling tracks, Invasive non-native species, Stock feeding, Disposal of household or recreational facility waste
002338	Drumalough Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	I01, X, E03.01, J02.05	Invasive non-native species, No threats or pressures, Disposal of household or recreational facility waste, Modification of hydrographic functioning, general
002339	Ballynamona Bog and Corkip Lough SAC	Active raised bogs [7110], Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120], Turloughs [3180], Depressions on peat substrates of the Rhynchosporion [7150]	J02.05, E03.01, J02.01, I01, A04, A10.01	Modification of hydrographic functioning, general, Disposal of household or recreational facility waste, Landfill, land reclamation and drying out, general, Invasive non-native species, Grazing, Removal of hedges and copses or scrub
002346	Brown Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	J02.15, K01.03, X	Other human induced changes in hydraulic conditions, Drying out, No threats or pressures
002347	Camderry Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	J02.07, J02.15, B02.02, J02.08, J01.01, A10, A02.01, C01.03.02, A04.02.02	Water abstractions from groundwater, Other human induced changes in hydraulic conditions, Forestry clearance, Raising the groundwater table or artificial recharge of groundwater, Burning down, Restructuring agricultural land holding, Agricultural intensification, Mechanical removal of peat, Non intensive sheep grazing

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002348	Clooneen 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]	C01.03.02, A04.02.01, A09, A03	Mechanical removal of peat, Non intensive cattle grazing, Irrigation, Mowing or cutting of grassland
002349	Corbo Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	C01.03.02, J02.15, X	Mechanical removal of peat, Other human induced changes in hydraulic conditions, No threats or pressures
002350	Curraghlehanagh Bog SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	J01.01, C01.03.02, J02.08, J02.15, B02.02, A04.02.02, J02.07	Burning down, Mechanical removal of peat, Raising the groundwater table or artificial recharge of groundwater, Other human induced changes in hydraulic conditions, Forestry clearance, Non intensive sheep grazing, Water abstractions from groundwater
002353	Redwood Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	D01.02, A01, C01.03, J01, D01.01, X	Roads, motorways, Cultivation, Peat extraction, Fire and fire suppression, Paths, tracks, cycling tracks, No threats or pressures
002354	Tullaghanrock Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	A04.02.01, J02.04, X, B	Non intensive cattle grazing, Flooding modifications, No threats or pressures, Sylviculture, forestry
002356	Ardgraigue Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	E03.01, J02.07, E03.03, B02.01.02, C01.03.02, J01.01, J02.06, A02.01, X, J02.15	Disposal of household or recreational facility waste, Water abstractions from groundwater, Disposal of inert materials, Forest replanting (non native trees), Mechanical removal of peat, Burning down, Water abstractions from surface waters, Agricultural intensification, No threats or pressures, Other human induced changes in hydraulic conditions
004017	Mongan Bog SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	C01.01, C01.03, D05, A04	Sand and gravel extraction, Peat extraction, Improved access to site, Grazing

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004031	Inner Galway Bay SPA	Turnstone (Arenaria interpres) [A169], Ringed Plover (Charadrius hiaticula) [A137], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Dunlin (Calidris alpina) [A149], Sandwich Tern (Sterna sandvicensis) [A191], Wetland and Waterbirds [A999], Black-headed Gull (Chroicocephalus ridibundus) [A179], Black-throated Diver (Gavia arctica) [A002], Common Gull (Larus canus) [A182], Curlew (Numenius arquata) [A160], Golden Plover (Pluvialis apricaria) [A140], Teal (Anas crecca) [A052], Lapwing (Vanellus vanellus) [A142], Common tern (Sterna hirundo) [A193], Cormorant (Phalacrocorax carbo) [A017], Bar-tailed Godwit (Limosa lapponica) [A157], Redshank (Tringa totanus) [A162], Grey Heron (Ardea cinerea) [A028], Wigeon (Anas penelope) [A050], Great Northern Diver (Gavia immer) [A003], Red-breasted Merganser (Mergus serrator) [A069]	D01.02, F03.01, A08, E02, G01.01, A04, F02.03, F01, E01, G01.02, J02.12, E03, J02.01.02	Roads, motorways, Hunting, Fertilisation, Industrial or commercial areas, Nautical sports, Grazing, Leisure fishing, Marine and Freshwater Aquaculture, Urbanised areas, human habitation, Walking, horseriding and non-motorised vehicles, Dykes, embankments, artificial beaches, general, Discharges, Reclamation of land from sea, estuary or marsh
004036	Killala Bay/Moy Estuary SPA	Wetland and Waterbirds [A999], Dunlin (Calidris alpina) [A149], Curlew (Numenius arquata) [A160], Ringed Plover (Charadrius hiaticula) [A137], Bar-tailed Godwit (Limosa lapponica) [A157], Golden Plover (Pluvialis apricaria) [A140], Grey Plover (Pluvialis squatarola) [A141], Sanderling (Calidris alba) [A144], Redshank (Tringa totanus) [A162]	G01.02, F02.03, A08, E01	Walking, horseriding and non-motorised vehicles, Leisure fishing, Fertilisation, Urbanised areas, human habitation
004048	Lough Gara SPA	Whooper Swan (Cygnus cygnus) [A038], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	B, A08, X	Sylviculture, forestry, Fertilisation, No threats or pressures
004050	Lough Arrow SPA	Wetland and Waterbirds [A999], Little Grebe (Tachybaptus ruficollis) [A004], Tufted Duck (Aythya fuligula) [A061]	F02.03, A08	Leisure fishing, Fertilisation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004058	Lough Derg (Shannon) SPA	Goldeneye (Bucephala clangula) [A067], Tufted Duck (Aythya fuligula) [A061], Wetland and Waterbirds [A999], Common tern (Sterna hirundo) [A193], Cormorant (Phalacrocorax carbo) [A017]	F02.03, F03.01, G01.01, A08	Leisure fishing, Hunting, Nautical sports, Fertilisation
004064	Lough Ree SPA	Common tern (Sterna hirundo) [A193], Lapwing (Vanellus vanellus) [A142], Common Scoter (Melanitta nigra) [A065], Coot (Fulica atra) [A125], Shoveler (Anas clypeata) [A056], Mallard (Anas platyrhynchos) [A053], Wigeon (Anas penelope) [A050], Teal (Anas crecca) [A052], Tufted Duck (Aythya fuligula) [A061], Wetland and Waterbirds [A999], Little Grebe (Tachybaptus ruficollis) [A004], Whooper Swan (Cygnus cygnus) [A038], Golden Plover (Pluvialis apricaria) [A140], Goldeneye (Bucephala clangula) [A067]	I01, G01.01, G01.02, F02.03, F03.01, A04, B, A08	Invasive non-native species, Nautical sports, Walking, horseriding and non-motorised vehicles, Leisure fishing, Hunting, Grazing, Sylviculture, forestry, Fertilisation
004077	River Shannon and River Fergus Estuaries SPA	Whooper Swan (Cygnus cygnus) [A038], Black-tailed Godwit (Limosa limosa) [A156], Lapwing (Vanellus vanellus) [A142], Knot (Calidris canutus) [A143], Scaup (Aythya marila) [A062], Wigeon (Anas penelope) [A050], Black-headed Gull (Chroicocephalus ridibundus) [A179], Wetland and Waterbirds [A999], Ringed Plover (Charadrius hiaticula) [A137], Redshank (Tringa totanus) [A162], Golden Plover (Pluvialis apricaria) [A140], Curlew (Numenius arquata) [A160], Teal (Anas crecca) [A052], Dunlin (Calidris alpina) [A149], Greenshank (Tringa nebularia) [A164], Pintail (Anas acuta) [A054], Shoveler (Anas clypeata) [A056], Light-bellied Brent Goose (Branta bernicla hrota) [A046], Grey Plover (Pluvialis squatarola) [A141], Cormorant (Phalacrocorax carbo) [A017], Shelduck (Tadorna	E02, F01, A08, E03, D03.02, G01.01, E01	Industrial or commercial areas, Marine and Freshwater Aquaculture, Fertilisation, Discharges, Shipping lanes, Nautical sports, Urbanised areas, human habitation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		tadorna) [A048], Bar-tailed Godwit (Limosa lapponica) [A157]		
004086	River Little Brosna Callows SPA	Black-headed Gull (Chroicocephalus ridibundus) [A179], Lapwing (Vanellus vanellus) [A142], Pintail (Anas acuta) [A054], Shoveler (Anas clypeata) [A056], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Teal (Anas crecca) [A052], Wetland and Waterbirds [A999], Golden Plover (Pluvialis apricaria) [A140], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Black-tailed Godwit (Limosa limosa) [A156]	F03.01, A04, E01.03, A08, F02.03, A03, D01.01	Hunting, Grazing, Dispersed habitation, Fertilisation, Leisure fishing, Mowing or cutting of grassland, Paths, tracks, cycling tracks
004096	Middle Shannon Callows SPA	Black-headed Gull (Chroicocephalus ridibundus) [A179], Black-tailed Godwit (Limosa limosa) [A156], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Lapwing (Vanellus vanellus) [A142], Golden Plover (Pluvialis apricaria) [A140], Wetland and Waterbirds [A999], Corncrake (Crex crex) [A122]	G01.02, F02.03, E01, A04, D01.01, A04.03, A03, A08, D01.05, G01.01, F03.01	Walking, horseriding and non-motorised vehicles, Leisure fishing, Urbanised areas, human habitation, Grazing, Paths, tracks, cycling tracks, Abandonment of pastoral systems lack of grazing, Mowing or cutting of grassland, Fertilisation, Bridge, viaduct, Nautical sports, Hunting
004097	River Suck Callows SPA	Wetland and Waterbirds [A999], Lapwing (Vanellus vanellus) [A142], Whooper Swan (Cygnus cygnus) [A038], Wigeon (Anas penelope) [A050], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Golden Plover (Pluvialis apricaria) [A140]	F02.03, A04, E01.03, F03.01, A08, A03, G01.01, B	Leisure fishing, Grazing, Dispersed habitation, Hunting, Fertilisation, Mowing or cutting of grassland, Nautical sports, Sylviculture, forestry
004101	Ballykenny-Fisherstown Bog SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	A04, G01.01, F02.03, B, F03.01	Grazing, Nautical sports, Leisure fishing, Sylviculture, forestry, Hunting
004103	All Saints Bog SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	F03.01, J01, C01.01, A04, B01, C01.03.02, D01.02, A08, A01,	Hunting, Fire and fire suppression, Sand and gravel extraction, Grazing, Forest planting on open ground, Mechanical removal of

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
			C01.03, A03, E01.03	peat, Roads, motorways, Fertilisation, Cultivation, Peat extraction, Mowing or cutting of grassland, Dispersed habitation
004105	Bellanagare Bog SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]	D01.02, A04, J02.05.02, B01, C01.03	Roads, motorways, Grazing, Modifying structures of inland water courses, Forest planting on open ground, Peat extraction
004129	Ballysadare Bay SPA	Light-bellied Brent Goose (Branta bernicla hrota) [A046], Grey Plover (Pluvialis squatarola) [A141], Wetland and Waterbirds [A999], Bar-tailed Godwit (Limosa lapponica) [A157], Redshank (Tringa totanus) [A162], Dunlin (Calidris alpina) [A149]	E01.01, F03.01, A08, F01	Continuous urbanisation, Hunting, Fertilisation, Marine and Freshwater Aquaculture
004139	Lough Croan Turlough SPA	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Wetland and Waterbirds [A999], Golden Plover (Pluvialis apricaria) [A140], Shoveler (Anas clypeata) [A056]	A08, A04	Fertilisation, Grazing
004140	Four Roads Turlough SPA	Wetland and Waterbirds [A999], Greenland White-fronted Goose (Anser albifrons flavirostris) [A395], Golden Plover (Pluvialis apricaria) [A140]	A04	Grazing

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.
Narrow-mouthed Whorl Snail (Vertigo angustior)	[1014]	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.
Marsh Fritillary (Euphydryas aurinia)	[1065]	Declines in habitat quality lead to species decline.	Habitat management; land use change and drainage.
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
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.
Annual vegetation of drift lines	[1210]	Grazing; sand and gravel extraction; recreational activities; coastal protection works.	Overgrazing and erosion. Changes in management.
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.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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 climate change. There have been no significant losses in sea cliff habitat since the Directive came into force.	Land use activities such as tourism and/or agricultural practices. Direct alteration to the habitat or effects such as burning or drainage.
Lesser horseshoe bat (Rhinolophus hipposideros)	[1303]	Habitat availability, range and roost availability.	Temperature 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); hunting; 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.
Harbour Seal (Phoca vitulina)	[1365]	Distance to human activities, accidental entanglement in fishing gear competition for prey resources, illegal killing, pollution and habitat degradation.	Prey availability, reduction in available habitat and water quality.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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.
Slender Naiad (Najas flexilis)	[1833]	Enrichment from human induced pressures leading to eutrophication.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Embryonic shifting dunes	[2110]	Natural erosion processes exacerbated by recreation and sand extraction. Coastal protection interfering with natural processes.	Overgrazing, and erosion. Changes in management.
Shifting dunes along the shoreline with white dunes (Ammophila arenaria)	[2120]	Recreation and coastal defences, which may interfere with local sediment dynamics.	Overgrazing, and erosion. Changes in management.
Fixed coastal dunes with herbaceous vegetation (grey dunes)	[2130]	Recreation; overgrazing and inappropriate grazing: non-native plant species, particularly sea buckthorn (Hippophae rhamnoides).	Overgrazing, and erosion. Changes in management.
Humid dune slacks	[2190]	Agricultural improvement; overgrazing and inappropriate grazing; forestry; recreational activity.	Overgrazing, and erosion. Changes in management. Sensitive to hydrological change.
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.
Oligotrophic to mesotrophic standing waters with vegetation (Littorelletea uniflorae and/or Isoeto-Nanojuncetea)	[3130]	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.
Hard oligo-mesotrophic waters with benthic vegetation of muskgrass (Chara spp.)	[3140]	Hydrological changes, afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	[3150]	Hydrological changes, afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Natural dystrophic lakes and ponds	[3160]	Nutrient alterations; management shifts in the associated peatland habitat, 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.
Rivers with muddy banks with vegetation (Chenopodion rubri p.p. and Bidention p.p.)	[3270]	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.
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.

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.
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.
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.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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 and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	[8120]	Overgrazing and pressures associated with the non-native invasive species New Zealand willowherb (Epilobium brunnescens).	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
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 special conservation interests from each Special Protection Area of Conservation as per article 12 reporting from the National Parks and Wildlife Services

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A002	Black-throated Diver	Gavia arctica	G01	Marine fish and shellfish harvesting (professional, recreational) causing reduction of species/prey populations and disturbance of species
A003	Great Northern Diver	Gavia immer	C03, F02, G01, H03	Renewable abiotic energy use, Fishing and harvesting aquatic resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution
A004	Little Grebe	Tachybaptus ruficollis ruficollis	Xxp/Xxt	No threats and pressures identified by the NPWS
A017	Cormorant	Phalacrocorax carbo carbo	D01	Wind, wave and tidal power, including infrastructure
A028	Grey Heron	Ardea cinerea cinerea	H01, Xxp/Xxt	Pollution to surface waters (limnic & terrestrial, marine & brackish), No threats and pressures identified by the NPWS
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 resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Changes in abiotic conditions

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
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
A052	Teal	Anas crecca	Xxp/Xxt	No threats and pressures identified by the NPWS
A053	Mallard	Anas platyrhynchos	Xxp/Xxt	No threats and pressures identified by the NPWS
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 resources, 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

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A065	Common Scoter	Melanitta nigra nigra	A04, C03, F02, G01, H01, H03, I01, K03, M02	Grazing, Renewable abiotic energy use, Fishing and harvesting aquatic resources, Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Marine water pollution, Invasive non-native species, Interspecific faunal relations, Changes in biotic conditions
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 resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution
A122	Corn Crake	Crex crex	A03.01, A04.01, K03.04, M01.03	Intensive Mowing or intensification, Intensive grazing, Predation, Flooding and rising precipitations
A125	Eurasian Coot	Fulica atra atra	C03, G01, H01	Renewable abiotic energy use, Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish)
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 resources, 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
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 resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
A142	Northern 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	Red Knot	Calidris canutus	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
A144	Sanderling	Calidris alba	C03, F01, G01, H03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Marine water pollution, 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 resources, 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
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 resources, 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 resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
A160	Eurasian Curlew	Numenius arquata	C03, F01, F02, G01, H03, J02, J03	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications
A162	Common Redhank	Tringa totanus	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Fishing and harvesting aquatic resources, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Human induced changes in hydraulic conditions, Other Ecosystem Modifications, Changes in abiotic conditions
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

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A179	Black-Headed Gull	Larus ridibundus	A04, C03, F02, H03, J03, M01	Grazing, Renewable abiotic energy use, Fishing and harvesting aquatic resources, Marine water pollution, Other Ecosystem Modifications, Changes in abiotic conditions
A182	Common Gull	Larus canus	A04, C03, F02, H03, J03, M01	Grazing, Renewable abiotic energy use, Fishing and harvesting aquatic resources, Marine water pollution, Other Ecosystem Modifications, Changes in abiotic conditions
A191	Sandwich Tern	Sterna sandvicensis	C03, I01	Renewable abiotic energy use, Invasive non-native species
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
A395	Greater 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.

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		• 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.

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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

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			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.

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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.

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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

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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.

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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.

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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.

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Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co- operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.	• 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.

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

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

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Level			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan (2021 - 2030)	• 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.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive.	• 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.

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

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

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

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	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.

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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

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			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.

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		• 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

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		• 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.

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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.

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

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APPENDIX 3

AA Screening Report for 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:

Roscommon County Council

Comhairle Contae Ros Comáin
Roscommon County Council

Date: **January 2024**

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

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

User is responsible for Checking the Revision Status of This Document

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Client: Roscommon 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 Roscommon County Council.

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1. INTRODUCTION

1.1 Background

This is the Appropriate Assessment (AA) Screening Report for modifications to the Roscommon County Council (RCC) 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 RCC. These submissions were taken into consideration prior to finalisation of the LACAP. RCC have prepared a Chief Executive Report on the submissions received. This document details the submissions received, RCC 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 Roscommon County Council LACAP 2024 - 2029.
2. The Draft NIR for the Roscommon County Council LACAP 2024 - 2029.
3. The Draft SEA Environmental Report for the Roscommon County Council LACAP 2024 - 2029.
4. Roscommon County Council LACAP Submissions Chief Executive Report.
5. The SEA Screening Report for modifications to Roscommon 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 RCC 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
SRM 1	Action GL8 has been moved to Action SRM 1 and all actions have been renumbered accordingly.
GL 1	The action below has been amended to include the words "to ensure alignment with higher order plans": Prepare and adopt Roscommon County Climate Action Plan in accordance with obligations and to highlight organisational commitment to carbon neutral transition, to periodically review actions to ensure alignment with higher order plans, in line with emerging findings on future climate impacts and new technologies and ensure that relevant findings at local level are fed upwards into national level policy and decision-making.
NEGI 10	The action below has been amended to include the sentence "with the aim of advocating for the elimination and avoidance of glyphosate-based products": Implement the sustainable management practices for public open spaces report and guidelines with the aim of advocating for the elimination and avoidance of glyphosate-based products in local authority operations and promote education and awareness on the use of herbicides and pesticides to the public and local communities to protect biodiversity and water quality. Training regarding herbicides and pesticides promotes use that does not cause significant effects on the receiving water environment, biodiversity or European sites Highlight danger of invasive species and develop internal and external educational resources on prevention and biodiversity-aware eradication. Ensure that the invasive species educational resource is developed by a competent ecology team.
CRT 2	The action below has been amended to include the sentences after "3rd level institutions": Promote innovation, research and capacity building in the climate action area in conjunction with the local authority departments, communities and external agencies, including 3rd level institutions and sporting organisations, including engagement with the Green Club Programme, working with the CARO and GAA, in the promotion and support of projects by participating clubs to meet the objectives, and during key phases of the programme to 2029.
CRT 4	The action below has been amended to include the word "prioritising": Climate action proof community grants administered by Roscommon County Council, prioritising projects that can demonstrate improvements in waste minimization, circular economy, energy savings, renewables and behavioural change.
CRT 5	The action below has been amended to include the sentence after "guidance in place": Support communities in the development of nature-based solutions in line with green infrastructure strategy and source protection guidance in place. RCC will collaborate with communities to strengthen local food security and promote equity and well-being through support for community gardens allotments as appropriate.

Action	Summary of Modification
SRM 1	The action below has been amended to include the sentences after "recycling": Establish links between community organisations at a local level to develop opportunities in the area of waste reduction, reuse and recycling, provide support as appropriate, to progress, develop and/or expand circular economic activities.
SRM 2	The action below has been amended to include the words "in conjunction with existing agri-environmental schemes and": Engage with Teagasc and the agricultural community on the potential for emissions reduction, biodiversity enhancement and environmental pollution prevention in conjunction with existing agri-environmental schemes and through the application of innovative technologies in waste management and renewable energy generation.
DZ 2	The action below has been amended to include the sentence after "Roscommon town": RCC will embrace its lead role in minimising waste and embracing circular economy principles and to leverage influence over resident's behaviours and attitude towards waste and to build capacity in the local and business community to support waste minimisation and the circular economy in Roscommon town and provide support as appropriate, to progress, develop and/or expand circular economic activities.
DZ 16	The action below has been amended to include the words "including Geothermal potential": Initiate a study on the potential for alternative heat sources, including Geothermal potential, within the Roscommon Town DZ area for residential, commercial, community and public sector/institutional application.

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
SRM 1	Action GL8 has been moved to Action SRM 1 and all actions have been renumbered accordingly.	This amendment is intended to ensure plan organisation. The amendment does not result in the introduction of additional environmental effects not already considered under the SEA/AA process to date.
GL 1	The action below has been amended to include the words "to ensure alignment with higher order plans": Prepare and adopt Roscommon County Climate Action Plan in accordance with obligations and to highlight organisational commitment to carbon neutral transition, to periodically review actions to ensure alignment with higher order plans, in line with emerging findings on future climate impacts and new technologies and ensure that relevant findings at local level are fed upwards into national level policy and decision-making.	This amended action provides clarification to the text previously considered. It clarifies the Plan will be aligned with high order plans. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process.
NEGI 10	The action below has been amended to include the sentence "with the aim of advocating for the elimination and avoidance of glyphosate-based products": Implement the sustainable management practices for public open spaces report and guidelines with the aim of advocating for the elimination and avoidance of glyphosate-based products in local authority operations and promote education and awareness on the use of herbicides and pesticides to the public and local communities to protect biodiversity and water quality. Training regarding herbicides and pesticides promotes use that does not cause significant effects on the receiving water environment, biodiversity or European sites Highlight danger of invasive species and develop internal and external educational resources on prevention and biodiversity-aware eradication. Ensure that the invasive species educational resource is developed by a competent ecology team.	This amended action provides clarification to the text previously considered. It clarifies the focus on elimination and avoidance of glyphosate-based products. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process.

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
CRT 2	The action below has been amended to include the sentences after "3rd level institutions": Promote innovation, research and capacity building in the climate action area in conjunction with the local authority departments, communities and external agencies, including 3rd level institutions and sporting organisations, including engagement with the Green Club Programme, working with the CARO and GAA, in the promotion and support of projects by participating clubs to meet the objectives, and during key phases of the programme to 2029.	This amended action provides clarification to the text previously considered. It adds stakeholders and actions that are considered in this action. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process.
CRT 4	The action below has been amended to include the word "prioritising": Climate action proof community grants administered by Roscommon County Council, prioritising projects that can demonstrate improvements in waste minimization, circular economy, energy savings, renewables and behavioural change.	This amended action provides clarification to the text previously considered. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process.
CRT 5	The action below has been amended to include the sentence after "guidance in place": Support communities in the development of nature-based solutions in line with green infrastructure strategy and source protection guidance in place. RCC will collaborate with communities to strengthen local food security and promote equity and well-being through support for community gardens allotments as appropriate.	This amended action provides clarification to the text previously considered. It clarifies the County collaboration with communities. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process.
SRM 1	The action below has been amended to include the sentences after "recycling": Establish links between community organisations at a local level to develop opportunities in the area of waste reduction, reuse and recycling, provide support as appropriate, to progress, develop and/or expand circular economic activities.	This amended action provides clarification to the text previously considered. It clarifies the County collaboration towards circular economy activities. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process, and mitigated against under the Environmental Governance Principles defined.

Action	Summary of Modification	Evaluation of Potential Environmental Implications of each Plan Action Modification
SRM 2	The action below has been amended to include the words "in conjunction with existing agri-environmental schemes and": Engage with Teagasc and the agricultural community on the potential for emissions reduction, biodiversity enhancement and environmental pollution prevention in conjunction with existing agri-environmental schemes and through the application of innovative technologies in waste management and renewable energy generation.	This amended action provides clarification to the text previously considered. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process.
DZ 2	The action below has been amended to include the sentence after "Roscommon town": RCC will embrace its lead role in minimising waste and embracing circular economy principles and to leverage influence over resident's behaviours and attitude towards waste and to build capacity in the local and business community to support waste minimisation and the circular economy in Roscommon town and provide support as appropriate, to progress, develop and/or expand circular economic activities.	This amended action provides clarification to the text previously considered. It clarifies the County collaboration towards the circular economy activities. This amendment is not likely to have any significant environmental effects not already considered in the SEA and AA process, and mitigated against under the Environmental Governance Principles defined.
DZ 16	The action below has been amended to include the words "including Geothermal potential": Initiate a study on the potential for alternative heat sources, including Geothermal potential, within the Roscommon Town DZ area for residential, commercial, community and public sector/institutional application.	This amended action provides clarification to the text previously considered. It includes the geothermal potential to the alternative heat sources study. This amendment is not likely to have any significant environmental effects not already considered in the SEA and 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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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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