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ENVIRONMENTAL SCIENCE &
PLANNING

WESTMEATH LOCAL AREA CLIMATE ACTION PLAN 2024-2029

Natura Impact Report

Prepared for:
Westmeath County Council



WESTMEATH COUNTY COUNCIL
Comhairle Chontae na hIarmhí

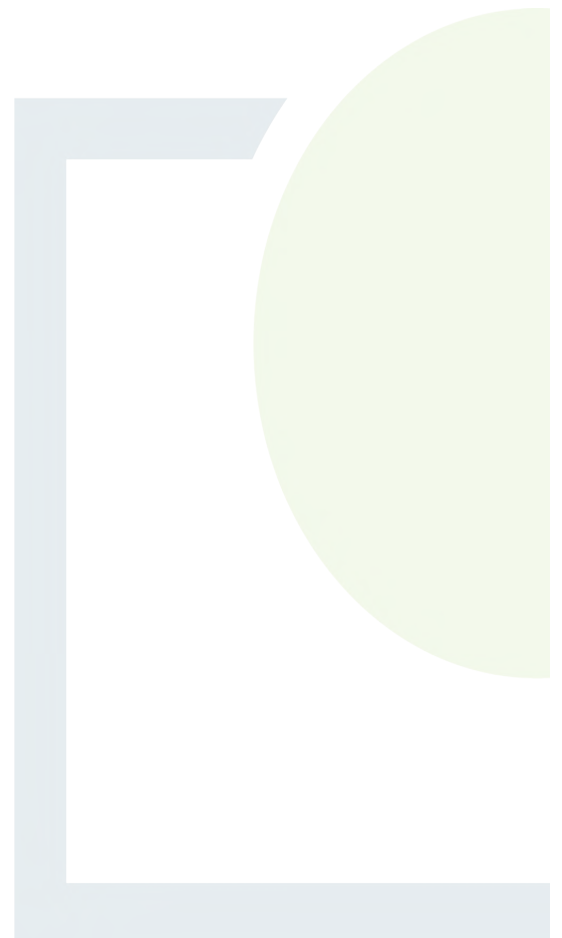
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Natura Impact Report for the Westmeath Local Area Climate Action Plan 2024-2029

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

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1. INTRODUCTION

1.1 Background

This Natura Impact Report (NIR) has been prepared in support of the Appropriate Assessment (AA) of the Draft Westmeath Local Area Climate Action Plan 2024-2028 [the Draft 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 ongoing AA process that is being undertaken alongside the preparation of the Draft LACAP. It will be considered, alongside other documentation prepared as part of this process, when Westmeath County Council finalises the AA at adoption of the Draft LACAP.

1.2 Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the “favourable conservation status” of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Council Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable of them. These two designations are collectively known as European sites which form the Natura 2000 Network.

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

1.3 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 literature¹ 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 new Draft County Development Plan and accompanying the SEA Environmental Report and the Council’s current County Development Plan and associated SEA Environmental Report and AA Natura Impact Report.

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.



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 Draft LACAP comprised the following elements:

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

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

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

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



The assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model², where, in order for an effect to be established all three elements of this mechanism must be in place. The absence or removal of one of the elements of the model is sufficient to conclude that a potential effect is not of any relevance or significance.

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

The scope of the AA was informed by the submissions received on the scope of the accompanying Strategic Environmental Assessment³ (SEA) process being undertaken on the Draft LACAP, including a submission from the Department of Culture, Heritage and the Gaeltacht that provided various information and suggestions relevant to the AA.

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

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 DRAFT LOCAL AREA CLIMATE ACTION PLAN

2.1 Overview

The Draft Westmeath LACAP 2024-2029 will be prepared over the coming months. The Plan will provide a five-year framework to:

- Actively translate national climate policy to local circumstances with the prioritisation and acceleration of evidence-based measures;
- Assist in the delivery of the climate neutrality objective at local and community levels;
- Identify and deliver a Decarbonising Zone (DZ) by 2050 within the local authority area to act as a test bed for a range of climate mitigation, adaptation and biodiversity measures in a specifically defined area. This will be done through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective⁴.

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

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

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

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

The Climate Action and Low Carbon Development (Amendment) Act 2021 provides a statutory underpinning to climate action in Ireland. It specifies the requirement to develop a national Climate Action Plan (CAP) (and update it every year), a National Adaptation Framework (NAF), a National Long Term Climate Action Strategy and Sectoral Adaptation Plans (SAPs). It also specifies a series of carbon budgets and the associated sectoral emission ceilings. It sets out actions that must be taken to ensure delivery of commitments and a target to reduce GHG by 51% by 2030 and to achieve net zero GHG emissions by 2050.

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 defines the requirement for Local Authorities to prepare individual LACAPs for their functional area. The purpose of LACAPs will be to deliver effective climate action and mitigation at local authority and community levels. Local Authority County Development Plans must also be aligned with their LACAP.


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

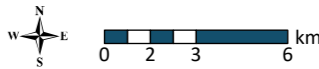
⁴ This is known as the National 2050 Climate Objective which establishes the national objective of achieving a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050.



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



Legend
 Local Authority Boundaries

Local Authority Boundary	
WESTMEATH COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	2.1
CLIENT:	WESTMEATH COUNTY COUNCIL
DATE: 26/07/2023	SCALE: 1:247,500 @ A3
	


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2.3 Westmeath 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 Westmeath 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.

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

2.4 Purpose and Scope of the LACAP 2024-2029

2.4.1 Need for the Plan

The Westmeath Local Authority Climate Action Plan (2024-2029) will consider specific adaptation and mitigation measures across key themes including Governance & Leadership, Built Environment & Transport, Natural Environment & Green Infrastructure, Communities: Resilience & Transitions and Sustainability & Resource Management.

2.4.2 Objectives of the Draft LACAP

The overall objectives of the Draft LACAP are:

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



2.4.3 Themes and Strategic Goals

Theme	Description/Overview	Strategic Goals
Governance & Leadership	This theme will aim to ensure that Climate Action is woven throughout all WCC policies and activities and that all plans and strategies created have Climate issues at the core of their development. It also seeks to ensure that sufficient resources are supplied to implement all measures.	Westmeath County Council will seek to provide robust leadership, governance and commitment to drive Climate Action throughout all our activities and to further provide guidance and support to our local communities to assist with their Climate Action objectives.
Built Environment & Transport	This theme will seek to ensure that all WCC building stock is upgraded as required to reduce GHG emissions and will also address our own internal transport emissions with a view to reduction of same. WCC will also aim to provide assistance to the wider community to help address their own climate ambitions relating to decreasing GHG emissions from both county wide building stock and transport emissions.	Westmeath County Council will endeavour to continue undertaking all necessary actions to ensure that our GHG emissions and energy usage are decreased in line with national targets.
Natural Environment & Green Infrastructure	This theme will assist in guiding WCC as to the various policies and related defined actions that will be required to be generated and implemented to promote, protect and enhance biodiversity throughout the county.	Westmeath County Council will continue to further protect, promote and enhance biodiversity across the county and will prioritise the use of nature-based green infrastructure, where possible, to overcome urban and climatic challenges.
Communities: Resilience & Transitions	This theme addresses the important links between WCC and the wider community and seeks to strengthen and formalise these links in order to assist communities in realising their climate ambitions.	Westmeath County Council will support and empower communities to become sustainable, inclusive and resilient through a Just Transition to a carbon neutral economy.
Sustainability & Resource Management	This theme will help WCC to consider our everyday work practices and recognise areas in which sustainability and resource management can be enhanced both from a staffing, workload and material point of views.	Westmeath County Council will place sustainability at the core of our everyday work practices and assist with putting in place efficient services for the community to effectively participate in the circular economy.
Sustainability & Resource Management	This theme will help WCC to consider our everyday work practices and recognise areas in which sustainability and resource management can be enhanced both from a staffing, workload and material point of views.	Westmeath County Council will place sustainability at the core of our everyday work practices and assist with putting in place efficient services for the community to effectively participate in the circular economy.



2.4.4 LACAP Geographic Area

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



3. SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Introduction to Screening

This stage of the process identifies any potential significant effects 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 habitat⁵ or species⁶ 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 Draft LACAP will not impose effects beyond the 15 km buffer. The assessment process also considers hydrogeological processes and possible effects to ground water with respect to ground water sensitive habitats and species.

⁵ Favourable conservation status of a habitat is achieved when: its natural range, and area it covers within that range, are stable or increasing; the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and the conservation status of its typical species is favourable.

⁶ The favourable conservation status of a species is achieved when: population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.



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

- NPWS (2015) Conservation Objectives for Killyconny Bog (Cloghbally) SAC [IE0000006] Version 1.
- NPWS (2022) Conservation Objectives for River Shannon Callows SAC [IE0000216] 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 (2021) Conservation Objectives for Charleville Wood SAC [IE0000571] Version 1.
- NPWS (2016) Conservation Objectives for Clara Bog SAC [IE0000572] 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 (2015) Conservation Objectives for Raheenmore Bog SAC [IE0000582] 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 (2015) Conservation Objectives for Garriskil Bog SAC [IE0000679] Version 1.
- NPWS (2018) Conservation Objectives for Lough Ennell SAC [IE0000685] Version 1.
- NPWS (2018) Conservation Objectives for Lough Owel SAC [IE0000688] Version 1.
- NPWS (2018) Conservation Objectives for Scragh Bog SAC [IE0000692] Version 1.
- NPWS (2021) Conservation Objectives for Castlesampson Esker SAC [IE0001625] Version 1.
- NPWS (2018) Conservation Objectives for Pilgrim's Road Esker SAC [IE0001776] Version 1.
- NPWS (2021) Conservation Objectives for White Lough, Ben Loughs and Lough Doo SAC [IE0001810] Version 1.
- NPWS (2018) Conservation Objectives for Split Hills and Long Hill Esker SAC [IE0001831] Version 1.
- NPWS (2012) Conservation Objectives for Boyne Coast and Estuary SAC [IE0001957] Version 1.
- NPWS (2021) Conservation Objectives for Lough Bane and Lough Glass SAC [IE0002120] Version 1.
- NPWS (2021) Conservation Objectives for Lough Lene SAC [IE0002121] Version 1.
- NPWS (2011) Conservation Objectives for River Barrow and River Nore SAC [IE0002162] Version 1.
- NPWS (2012) Conservation Objectives for Lower River Shannon SAC [IE0002165] Version 1.
- NPWS (2022) Conservation Objectives for Derragh Bog SAC [IE0002201] Version 9.
- NPWS (2022) Conservation Objectives for Mount Jessop Bog SAC [IE0002202] Version 9.
- NPWS (2022) Conservation Objectives for Girley (Drewstown) Bog SAC [IE0002203] Version 9.
- NPWS (2022) Conservation Objectives for Wooddown Bog SAC [IE0002205] Version 9.
- 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 (2021) Conservation Objectives for River Boyne and River Blackwater SAC [IE0002299] Version 1.
- NPWS (2018) Conservation Objectives for Ballymore Fen SAC [IE0002313] 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 Ballynamona Bog and Corkip Lough SAC [IE0002339] Version 1.
- NPWS (2016) Conservation Objectives for Moneybeg and Clareisland Bogs SAC [IE0002340] Version 1.
- NPWS (2015) Conservation Objectives for Ardagullion Bog SAC [IE0002341] Version 1.
- NPWS (2016) Conservation Objectives for Mount Hevey Bog SAC [IE0002342] Version 1.
- NPWS (2022) Generic Conservation Objectives for Mongan Bog SPA [IE0004017] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Derravaragh SPA [IE0004043] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Ennell SPA [IE0004044] Version 9.
- NPWS (2022) Generic Conservation Objectives for Glen Lough SPA [IE0004045] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Iron SPA [IE0004046] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Owel SPA [IE0004047] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Derg (Shannon) SPA [IE0004058] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Kinale and Derragh Lough SPA [IE0004061] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Ree SPA [IE0004064] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Sheelin SPA [IE0004065] Version 9.
- NPWS (2012) Conservation Objectives for River Shannon and River Fergus Estuaries SPA [IE0004077] Version 1.
- NPWS (2013) Conservation Objectives for Boyne Estuary SPA [IE0004080] Version 1.
- 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 Garriskil Bog SPA [IE0004102] Version 9.
- NPWS (2022) Generic Conservation Objectives for Lough Croan Turlough SPA [IE0004139] Version 9.
- NPWS (2022) Generic Conservation Objectives for River Boyne and River Blackwater SPA [IE0004232] 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 Draft 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 Draft LACAP Necessary to the Management of European Sites?

The overarching objective of the Draft 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 Draft LACAP is not considered to be directly connected with or necessary to the management of European sites.

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

The Draft 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.*
- *Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts).*
- *Emissions to air including greenhouse gas emissions and other emissions.*

The elements of the Draft LACAP with the highest potential to give rise to the effects indicated above are associated with construction phase elements of the implementation of the Draft LACAP. The operational phase elements of the Draft 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.

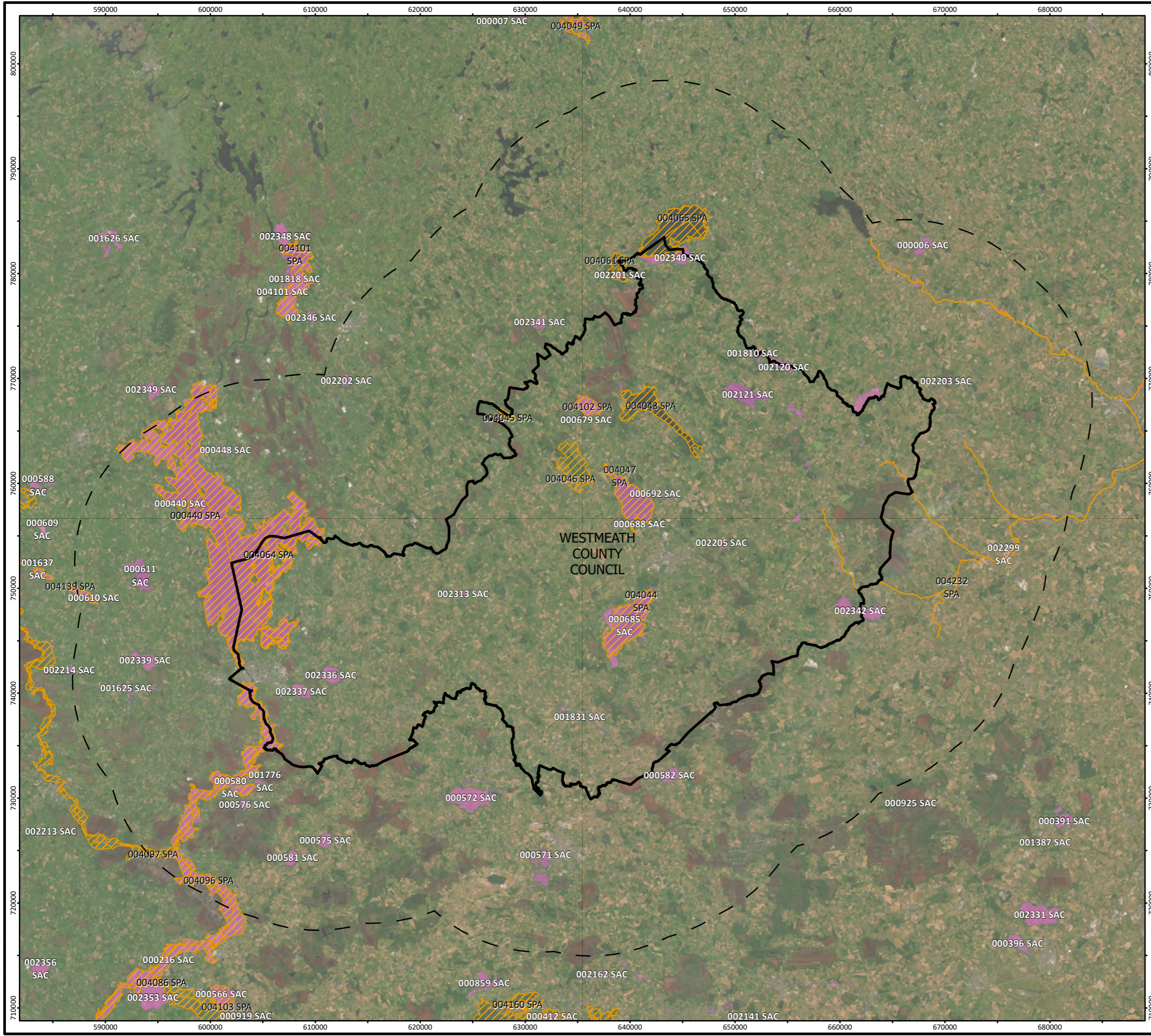


3.3.3 Screening of Sites

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, Draft LACAP proposals and the site to be screened;
- The distance of the relevant site from the Draft LACAP boundary; and
- The existence of a link between identified threats or vulnerabilities at a site to potential impacts that may arise from the Draft LACAP.

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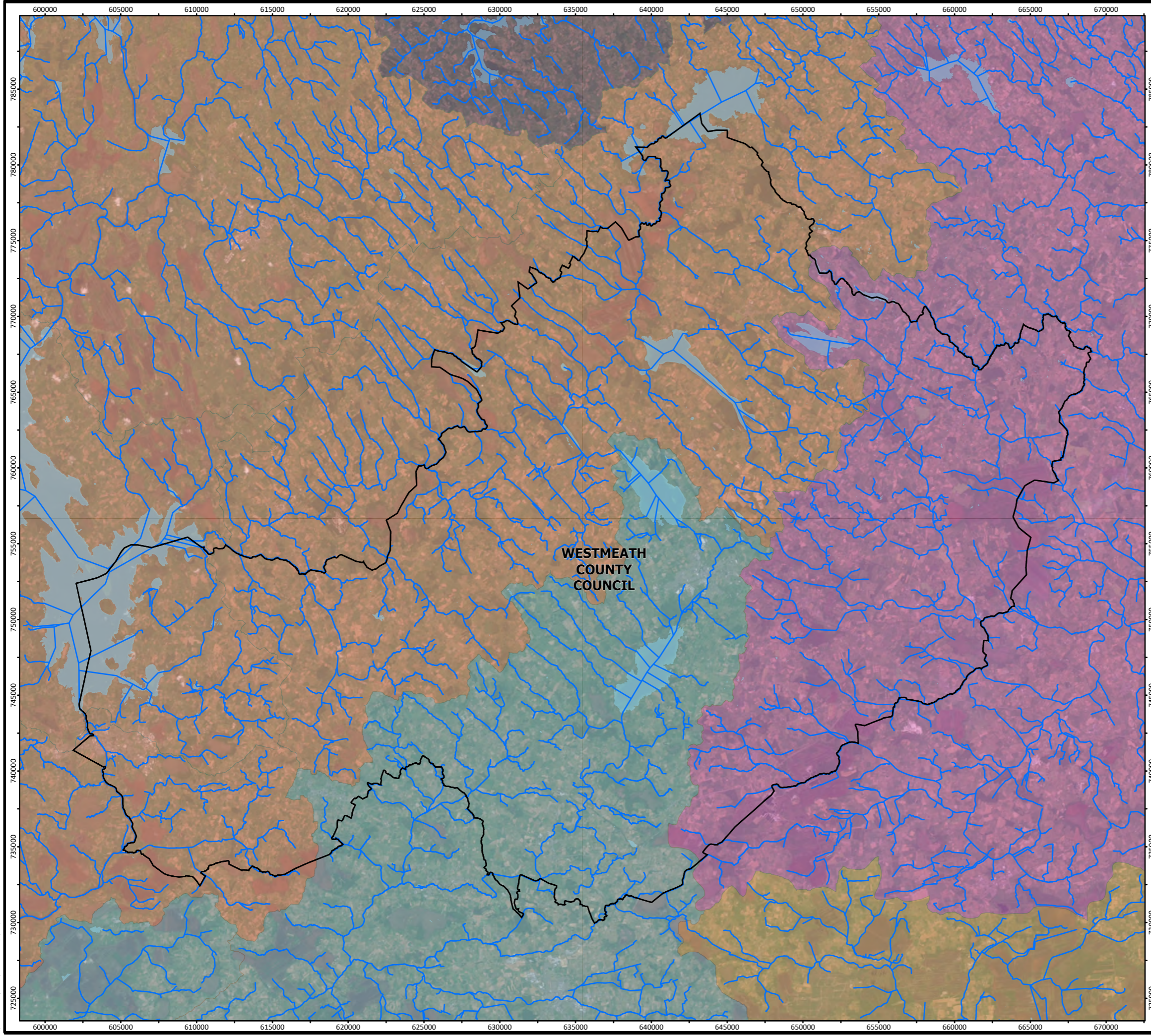


Legend

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

Special Areas of Conservation and Special Protected Areas	
WESTMEATH COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	3.1
CLIENT: WESTMEATH COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:357,500 @ A3

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- Legend**
- Local Authority Boundaries
 - Rivers
- WFD Catchments**
- Catchment Name**
- Barrow
 - Boyne
 - Erne
 - Lower Shannon
 - Upper Shannon

Hydrology	
WESTMEATH COUNTY COUNCIL Local Authority Climate Action Plans	
FIGURE NO:	3.2
CLIENT: WESTMEATH COUNTY COUNCIL	
DATE: 15/08/2023	SCALE: 1:247,500 @ A3



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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 (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000216	River Shannon Callows SAC	0	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Alkaline fens [7230], Otter (Lutra lutra) [1355], Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510], Limestone pavements [8240]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
000440	Lough Ree SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Alkaline fens [7230], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Otter (Lutra lutra) [1355], Bog woodland [91D0], 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], Limestone pavements [8240]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000679	Garriskil Bog SAC	0	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
000685	Lough Ennell SAC	0	Alkaline fens [7230]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
000688	Lough Owel SAC	0	Alkaline fens [7230], White-clawed crayfish (Austropotamobius pallipes) [1092], Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], Transition mires and quaking bogs [7140]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is the potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
000692	Scragh Bog SAC	0	Alkaline fens [7230], Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) [6216], Transition mires and quaking bogs [7140]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
001810	White Lough, Ben Loughs and Lough Doo SAC	0	White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
001831	Split Hills and Long Hill Esker SAC	0	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft LACAP provides for actions which may result in land use change and infrastructure development etc.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				<p>Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites.</p> <p>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.</p>		
002120	Lough Bane and Lough Glass SAC	0	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish (Austropotamobius pallipes) [1092]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
002121	Lough Lene SAC	0	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], White-clawed crayfish (Austropotamobius pallipes) [1092]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
002205	Wooddown Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
002313	Ballymore Fen SAC	0	Transition mires and quaking bogs [7140]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
002336	Carn Park Bog SAC	0	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is the potential for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
002337	Crosswood Bog SAC	0	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
002340	Moneybeg and Clareisland Bogs SAC	0	Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
002342	Mount Hevey Bog SAC	0	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft LACAP provides for actions which may result in land use change and infrastructure development etc.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				<p>Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites.</p> <p>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.</p>		
004043	Lough Derravarragh SPA	0	Tufted Duck (<i>Aythya fuligula</i>) [A061], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Pochard (<i>Aythya ferina</i>) [A059], Wetland and Waterbirds [A999], Coot (<i>Fulica atra</i>) [A125]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
004044	Lough Ennell SPA	0	Pochard (<i>Aythya ferina</i>) [A059], Wetland and Waterbirds [A999], Tufted Duck (<i>Aythya fuligula</i>) [A061], Coot (<i>Fulica atra</i>) [A125]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004045	Glen Lough SPA	0	Whooper Swan (<i>Cygnus cygnus</i>) [A038]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>Thus, there is the potential for significant effects to this European Site and its Special Conservation Interest as a result of activities proposed under the LACAP.</p>	Yes	Yes
004046	Lough Iron SPA	0	Whooper Swan (<i>Cygnus cygnus</i>) [A038], Coot (<i>Fulica atra</i>) [A125], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395], Wetland and Waterbirds [A999], Teal (<i>Anas crecca</i>) [A052], Shoveler (<i>Anas clypeata</i>) [A056], Wigeon (<i>Anas penelope</i>) [A050]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
004047	Lough Owel SPA	0	Shoveler (<i>Anas clypeata</i>) [A056], Coot (<i>Fulica atra</i>) [A125], Wetland and Waterbirds [A999]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is the potential for significant effects to this European Site and its Special Conservation Interests as a result of activities proposed under the LACAP.		
004061	Lough Kinale and Derragh Lough SPA	0	Wetland and Waterbirds [A999], Pochard (<i>Aythya ferina</i>) [A059], Tufted Duck (<i>Aythya fuligula</i>) [A061]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
004064	Lough Ree SPA	0	Goldeneye (<i>Bucephala clangula</i>) [A067], Common Scoter (<i>Melanitta nigra</i>) [A065], Mallard (<i>Anas platyrhynchos</i>) [A053], Little Grebe (<i>Tachybaptus ruficollis</i>) [A004], Coot (<i>Fulica atra</i>) [A125], Wetland and Waterbirds [A999], Shoveler (<i>Anas clypeata</i>) [A056], Tufted Duck (<i>Aythya fuligula</i>) [A061], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Lapwing (<i>Vanellus vanellus</i>) [A142], Teal (<i>Anas crecca</i>) [A052], Wigeon (<i>Anas penelope</i>) [A050], Common tern (<i>Sterna hirundo</i>) [A193]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
004065	Lough Sheelin SPA	0	Goldeneye (<i>Bucephala clangula</i>) [A067], Pochard (<i>Aythya ferina</i>) [A059], Tufted Duck (<i>Aythya fuligula</i>) [A061], Great Crested Grebe (<i>Podiceps cristatus</i>) [A005], Wetland and Waterbirds [A999]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
004096	Middle Shannon Callows SPA	0	Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Corncrake (<i>Crex crex</i>) [A122], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Wigeon (<i>Anas penelope</i>) [A050], Wetland and Waterbirds [A999], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Lapwing (<i>Vanellus vanellus</i>) [A142]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
004102	Garriskil Bog SPA	0	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				Thus, there is the potential for significant effects to this European Site and its Special Conservation Interest as a result of activities proposed under the LACAP.		
004232	River Boyne and River Blackwater SPA	0	Kingfisher (Alcedo atthis) [A229]	<p>The European Site is within the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>Thus, there is the potential for significant effects to this European Site and its Special Conservation Interest as a result of activities proposed under the LACAP.</p>	Yes	Yes
002201	Derragh Bog SAC	0.01	Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0]	<p>The European Site is within 500m of the Westmeath County LACAP area.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
000582	Raheenmore Bog SAC	0.61	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	<p>There is a separation distance of ca. 610 m between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft LACAP provides for actions which may result in land use change and infrastructure development etc.</p>	No	No



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				<p>Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites.</p> <p>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.</p>		
002341	Ardagullion Bog SAC	1.36	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	<p>There is a separation distance of ca. 1.36 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No
002203	Girley (Drewstown) Bog SAC	1.9	Degraded raised bogs still capable of natural regeneration [7120]	<p>There is a separation distance of ca. 1.9 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000572	Clara Bog SAC	2.73	Bog woodland [91D0], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], 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]	<p>There is a separation distance of ca. 2.73 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No
001776	Pilgrim's Road Esker SAC	2.91	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	<p>There is a separation distance of ca. 2.91 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No
000580	Mongan Bog SAC	3.34	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150]	<p>There is a separation distance of ca. 3.34 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p>	No	No



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.		
004017	Mongan Bog SPA	3.56	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	<p>This European Site is within 15km of the area of Westmeath LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
000571	Charleville Wood SAC	5.05	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0], <i>Desmoulin's whorl snail</i> (<i>Vertigo moulinsiana</i>) [1016]	<p>There is a separation distance of ca. 5.05 km between this European Site and the area of Westmeath County LACAP and a potential groundwater connection is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000576	Fin Lough (Offaly) SAC	5.06	Alkaline fens [7230], Geyer's whorl snail (<i>Vertigo geyeri</i>) [1013]	<p>There is a separation distance of ca. 5.06 km between this European Site and the area of Westmeath County LACAP and a potential groundwater connection is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes
000575	Ferbane Bog SAC	5.71	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	<p>There is a separation distance of ca. 5.71 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No
001625	Castlesampson Esker SAC	6.66	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210], Turloughs [3180]	<p>There is a separation distance of ca. 6.66 km between this European Site and the area of Westmeath County LACAP and a potential groundwater connection is present.</p> <p>The Draft LACAP provides for actions which may result in land use change and infrastructure development etc.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				<p>Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites.</p> <p>There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.</p>		
002339	Ballynamona Bog and Corkip Lough SAC	7.14	Turloughs [3180], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Bog woodland [91D0]	<p>There is a separation distance of ca. 7.14 km between this European Site and the area of Westmeath County LACAP and a potential groundwater connection is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes
000581	Moyclare Bog SAC	7.65	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	<p>There is a separation distance of ca. 7.65 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000611	Lough Funshinagh SAC	7.75	Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation [3270], Turloughs [3180]	<p>There is a separation distance of ca. 7.75 km between this European Site and the area of Westmeath County LACAP and a potential groundwater connection is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes
000448	Fortwilliam Turlough SAC	8.71	Turloughs [3180]	<p>There is a separation distance of ca. 8.71 km between this European Site and the area of Westmeath County LACAP and a potential groundwater connection is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interest of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes
002299	River Boyne and River Blackwater SAC	9.82	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0], Otter (<i>Lutra lutra</i>) [1355], Alkaline fens [7230], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Atlantic salmon (<i>Salmo salar</i>) [1106]	<p>There is a separation distance of ca. 9.82 km between this European Site and the area of Westmeath County LACAP and no hydrological connection is present.</p> <p>The Draft LACAP provides for actions which may result in land use change and infrastructure development etc.</p>	No	No



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				<p>Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites.</p> <p>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.</p>		
000006	Killyconny Bog (Cloghbally) SAC	11.44	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	<p>There is a separation distance of ca. 11.44 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No
002202	Mount Jessop Bog SAC	12.17	Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120]	<p>There is a separation distance of ca. 12.17 km between this European Site and the area of Westmeath County LACAP.</p> <p>The Draft 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.</p> <p>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.</p>	No	No



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
000610	Lough Croan Turlough SAC	13.13	Turloughs [3180]	<p>There is a separation distance of ca. 13.13 km between this European Site and the area of Westmeath County LACAP and a potential groundwater connection is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interest of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes
004139	Lough Croan Turlough SPA	13.14	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395], Wetland and Waterbirds [A999], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Shoveler (<i>Anas clypeata</i>) [A056]	<p>This European Site is within 15km of the area of Westmeath LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
004097	River Suck Callows SPA	13.28	Lapwing (<i>Vanellus vanellus</i>) [A142], Wetland and Waterbirds [A999], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wigeon (<i>Anas penelope</i>)	<p>This European Site is within 15km of the area of Westmeath LACAP which is within the known foraging range of the SCI species. Therefore, there is a pathway for potential effects.</p> <p>The Draft LACAP provides for actions which may result in land use change and infrastructure development etc.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			[A050], Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	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.		
002214	Killeglan Grassland SAC	14.68	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210]	There is a separation distance of ca. 14.68 km between this European Site and the area of Westmeath County LACAP. The Draft 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
002162	River Barrow and River Nore SAC	14.82	Otter (<i>Lutra lutra</i>) [1355], Estuaries [1130], Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1029], Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260], White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Nore Pearl Mussel (<i>Margaritifera durrovensis</i>) [1990], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330], European dry heaths [4030], Desmoulin's whorl snail (<i>Vertigo</i>	There is a separation distance of ca. 14.82 km between this European Site and the area of Westmeath County LACAP and no hydrological connection is present. The Draft LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites. At this distance, there are no pathways for significant effects to this European Site and its Qualifying Interests as a result of activities proposed under the LACAP.	No	No



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			moulinsiana) [1016], Twaite shad (<i>Alosa fallax</i>) [1103], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salmon (<i>Salmo salar</i>) [1106], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Brook lamprey (<i>Lampetra planeri</i>) [1096], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Reefs [1170], Sea lamprey (<i>Petromyzon marinus</i>) [1095], Killarney fern (<i>Trichomanes speciosum</i>) [1421]			
002241	Lough Derg, North-East Shore SAC	35.38	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Alkaline fens [7230], <i>Taxus baccata</i> woods of the British Isles [91J0], <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130], Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210], Limestone pavements [8240]	There is a separation distance of ca. 35.38 km between this European Site and the area of Westmeath County LACAP and a hydrological connection of 51.72 km (instream distance) is present. The Draft LACAP provides for actions which may result in land use change and infrastructure development etc. Therefore, there is potential for effects such as hydrological interactions, land take, disturbance etc. Which could affect European Sites.	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
				There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.		
004058	Lough Derg (Shannon) SPA	35.39	Cormorant (<i>Phalacrocorax carbo</i>) [A017], Tufted Duck (<i>Aythya fuligula</i>) [A061], Common tern (<i>Sterna hirundo</i>) [A193], Goldeneye (<i>Bucephala clangula</i>) [A067], Wetland and Waterbirds [A999]	<p>There is a separation distance of ca. 35.39 km between this European Site and the area of Westmeath County LACAP and a hydrological connection of 51.76 km (instream distance) is present.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes
004080	Boyne Estuary SPA	42.4	Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Shelduck (<i>Tadorna tadorna</i>) [A048], Lapwing (<i>Vanellus vanellus</i>) [A142], Sanderling (<i>Calidris alba</i>) [A144], Knot (<i>Calidris canutus</i>) [A143], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Little Tern (<i>Sterna albifrons</i>) [A195], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Wetland and Waterbirds [A999], Turnstone (<i>Arenaria interpres</i>) [A169], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Redshank (<i>Tringa totanus</i>) [A162]	<p>There is a separation distance of ca. 42.4 km between this European Site and the area of Westmeath County LACAP and a hydrological connection of 71.43 km (instream distance) is present.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
001957	Boyne Coast and Estuary SAC	43.6	Embryonic shifting dunes [2110], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Estuaries [1130], Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Mudflats and sandflats not covered by seawater at low tide [1140]	<p>There is a separation distance of ca. 43.6 km between this European Site and the area of Westmeath County LACAP and a hydrological connection of 71.68 km (instream distance) is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes
002165	Lower River Shannon SAC	69.24	Perennial vegetation of stony banks [1220], Estuaries [1130], Bottlenose dolphin (<i>Tursiops truncatus</i>) [1349], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Large shallow inlets and bays [1160], Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260], Atlantic salmon (<i>Salmo salar</i>) [1106], Mudflats and sandflats not covered by seawater at low tide [1140], Reefs [1170], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], Coastal lagoons [1150], Brook lamprey (<i>Lampetra planeri</i>) [1096], Sea lamprey (<i>Petromyzon marinus</i>) [1095], <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410], Mediterranean salt	<p>There is a separation distance of ca. 69.24 km between this European Site and the area of Westmeath County LACAP and a hydrological connection of 92.25 km (instream distance) is present.</p> <p>The Draft 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.</p> <p>There is the potential for significant effects to the Qualifying Interests of this European site as a result of activities proposed under the LACAP.</p>	Yes	Yes



Site Code	Site Name	Distance (km)	Qualifying Feature (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Potential for In-Combination Effects
			meadows (<i>Juncetalia maritimi</i>) [1410], Sandbanks which are slightly covered by sea water all the time [1110], Otter (<i>Lutra lutra</i>) [1355], Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1029], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]			
004077	River Shannon and River Fergus Estuaries SPA	91.75	Whooper Swan (<i>Cygnus cygnus</i>) [A038], Redshank (<i>Tringa totanus</i>) [A162], Pintail (<i>Anas acuta</i>) [A054], Wetland and Waterbirds [A999], Lapwing (<i>Vanellus vanellus</i>) [A142], Shoveler (<i>Anas clypeata</i>) [A056], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Teal (<i>Anas crecca</i>) [A052], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Scaup (<i>Aythya marila</i>) [A062], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Wigeon (<i>Anas penelope</i>) [A050], Knot (<i>Calidris canutus</i>) [A143], Curlew (<i>Numenius arquata</i>) [A160], Greenshank (<i>Tringa nebularia</i>) [A164], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Shelduck (<i>Tadorna tadorna</i>) [A048], Cormorant (<i>Phalacrocorax carbo</i>) [A017], Dunlin (<i>Calidris alpina</i>) [A149]	<p>There is a separation distance of ca. 91.75 km between this European Site and the area of Westmeath County LACAP and a hydrological connection of 122.01 km (instream distance) is present.</p> <p>The Draft 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.</p> <p>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.</p>	Yes	Yes



3.4 In-Combination effects with Other Plans and Programmes

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or programmes that might, in combination with the plan or project, have the potential to adversely affect European sites. Appendix 2 outlines a selection of plans or projects that may interact with the Plan to cause in-combination effects to European sites. These plans, programmes, strategies etc. were considered throughout the assessment.

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

The National Planning Framework (NPF) sets out Ireland's planning policy direction for the next 20 years. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSEs) and lower tier Development Plans and Local Area Plans. The RSE for the Eastern and Midland Region sets out objectives for land use planning, tourism, infrastructure, sustainable development, environmental protection and environmental management that have been subject to environmental assessment and must be implemented through the Draft LACAP. As required by the Planning and Development Act 2000, as amended, the Draft LACAP is consistent with and conforms with national and regional policies, plans and programmes, including the NPF and the RSE for the Eastern and Midland Region. The County Development Plan may, in turn, guide lower level strategic actions, such as the that will be subject to their own lower-tier environmental assessments.

In order to be realised, projects included in the Draft 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 Draft 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 Draft LACAP. Given the uncertainties that exist with regard to the scale and location of developments facilitated by the Draft 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 Draft 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 Draft LACAP:

- Is not directly connected with or necessary to the management of any European site; and
- May, if unmitigated, have significant adverse effects on 44 (no.) European sites.

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



4. STAGE 2 APPROPRIATE ASSESSMENT

4.1 Introduction

The Stage 2 AA assesses whether the Draft LACAP alone, or in-combination with other plans, programmes, and/or projects, would result in adverse effects on the integrity of the 44 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 44 European sites with pathway receptors for potential effects arising from the implementation of the Draft 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 website⁷.

4.3 Identifying and Characterising Potential Significant Effects

The following parameters can be used when characterising impacts⁸:

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

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

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



- Ecologically Significant Impact - An impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area.
- Integrity of a Site - The coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

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

Site-Specific Conservation Objectives (SSCOs) have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes that define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

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

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

Generic Conservation Objective for cSACs:

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

As identified above LACAP boundary has several European sites within it; therefore, there is potential for effects to European sites through urbanisation and direct habitat loss on foot of the implementation of the Draft LACAP; however, several mitigation measures have been integrated into the Draft LACAP to ensure that its implementation will not result in the loss of any habitat necessary for the ecological integrity of any European site; namely list of actions to avoid habitat loss 3.1⁹, 3.6¹⁰, 3.3¹¹, 3.4¹², 5.10¹³ and DZ15¹⁴.

⁹ Continue to promote Biodiversity and protect Natural Heritage in line with WCC Biodiversity Plan 2014-2020. Implement relevant actions of the Built Heritage and Archaeology Climate Change Sectoral Adaptation Plan 2019. Resource and implement relevant actions of the National Biodiversity Action Plan 2023-2030 and the Biodiversity Climate Change Sectoral Adaptation Plan 2019.

¹⁰ Continue to support the "Rational Use of Pesticides" Policy, as adopted by Westmeath County Council, whilst ensuring these substances are only used to a degree that does not cause significant effects on the receiving environment, such as the receiving water environment, biodiversity or European sites.

¹¹ Natural borders/buffers to be included as an integral component of the design of greenways/blueways, tracks and trails and amenity areas to promote natural enhancement. Ensure appropriate buffer zones are provided, maintained and protected to avoid potential impacts on designated habitats or protected species and habitats, and to protect and enhance wider bio-diversity.

¹² Develop and support the Tree Management Strategy which seeks to protect existing trees, promote native tree planting and advise on the appropriate maintenance of existing tree stock. Appropriate training regarding tree care and maintenance shall be undertaken by applicable staff regularly in line with the Tree Management Strategy.

¹³ WCC will continue to ensure that use of peat is fully eliminated in all areas of WCC functions.

¹⁴ Consideration should be given to protecting, promoting and maximising the opportunities in relation to biodiversity, green corridors, hedgerows and green spaces within the DZ and use these areas to full potential for carbon sequestration and quality of life. An assessment of current green & open spaces in the DZ should be undertaken and potential regarding tree planting, dedicated wastelands etc should be explored. Consider public lighting levels at night time in Town Centre and the seek to minimise the impact on Biodiversity having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage; and prioritising the use of native species.



Additionally, the environmental governance section of the LACAP sets out a number of measures which will ensure the protection of biodiversity throughout the implementation of the plan such as:

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

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 Draft 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 Draft 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 Draft LACAP provides actions to minimise potential fragmentation and to facilitate the enhancement of ecological corridors such as hedgerows; mitigation measures such as 3.1⁹, 3.6¹⁰, 3.3¹¹, 3.4¹² and DZ15¹⁴ (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: DZ15¹⁴.

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 Draft 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 Draft LACAP.

4.3.1.3 Disturbance to Key Species

Disturbance effects are caused 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 Draft LACAP due to the provision of active travel schemes and other green initiatives within the Draft LACAP; from the perspective that many of the tourism destinations or attractions in the area are in or adjacent to European sites.

The Draft 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 Draft LACAP avoid or minimise noise in compliance with the Environmental Noise Directive and associated National Regulations through the Westmeath County Council Noise Action Plan 2018 - 2023. Actions to ensure the protection of habitat quality with respect to disturbance effects from noise and other sources have been built into the Draft LACAP; namely, 2.12¹⁵, 2.16¹⁶, 2.17¹⁷, 2.18¹⁸, 2.19¹⁹, 3.4¹² and DZ15¹⁴ (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.

¹⁵ Reallocate suitable road space in favour of sustainable transport options, having due regard to environmental protection considerations, including cultural heritage protection and climate action co-benefits. Work towards ensuring network options are developed between active travel options and public transport routes.

¹⁶ Support the NTA regarding the integration and linking of existing and proposed green cycle and pedestrian routes to settlements and villages. Secure bicycle parking to be provided at key locations, having due regard to environmental sensitivities such as sensitive human receptors, cultural heritage, European sites and biodiversity.

¹⁷ Continue the development and provision of Active Travel infrastructure in the County through the NTA's Active Travel Programme, having due regard to environmental sensitivities such as sensitive human receptors, cultural heritage, European sites and biodiversity.

¹⁸ Safe Routes to Schools (SRTS). Continue to work with An Taisce Green Schools and the NTA to encourage as many pupils and students as possible in primary and post-primary schools to walk and cycle to school, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage etc.

¹⁹ Support the delivery and possible expansion of local bus services in the county, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.



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 Draft 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 Draft LACAP contains provisions to enhance biodiversity, landscape and the environment within Council boundary 2.11²⁰, 3.1⁹, 3.6¹⁰, 3.3¹¹, 3.4¹², and DZ15¹⁴. Similarly, the Draft 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 3.4¹² and DZ15¹⁴. 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 Draft 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 Draft LACAP.

²⁰ Identify WCC lands that may be suitable for climate action initiatives and biodiversity enhancement and develop an Action & Enhancement Plan for suitable sites identified; having due regard to the need to ensure renewable energy development supported by this action will not have any significant negative environmental effect.



4.3.1.5 Changes of Indicators of Conservation Value

Water quality is the primary macro indicator of conservation value. The Draft 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 2.8²¹, 3.3¹¹, 5.4²², 5.5²³, 5.12²⁴ and DZ17²⁵. Similarly, emissions to air have potential to adversely affect the conservation status of European sites; however, the Draft LACAP contains actions – such as 2.7²⁶, 2.12¹⁵, 2.13²⁷, 2.16²⁸, 2.17²⁹, 2.18³⁰, 2.19³¹, 2.21³², 2.22³³, 3.2³⁴ and 5.12²⁴ etc – which account for this.

²¹ Carry out a review of current drainage maintenance programmes and compare with flooding issues. Update as required.

²² Work with and support private group water schemes to identify drinking water sources that are at risk to the impacts of climate change and identify alternative reserve sources of water to maintain water supplies in critical times

²³ Carry out a review of discharge licenses to counter possible reduced assimilative capacity of water courses and amend/revoke as required.

²⁴ Regulate and enforce the National Enforcement Priorities (NEPs) which focus on delivering positive environmental outcomes for air quality, water quality and waste management.

²⁵ Permeable surfaces should be prioritised especially in public car parking facilities in the DZ. Planning will explore conditioning suitable areas as having permeable surfacing. Ensure all related construction works are designed and implemented in a manner that does not result in the occurrence of significant adverse environmental effects.

²⁶ WCC will collaborate with neighbouring local authorities to develop a comprehensive Electric Vehicle (EV) charging strategy, ensuring a seamless and regionally integrated charging infrastructure to support the widespread adoption of electric vehicles, having due regard to environmental sensitivities such as European sites and biodiversity.

²⁷ Explore sustainable transport solutions to encourage a modal shift, especially with regards to commuting. This action will be progressed whilst having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, and cultural heritage.

²⁸ Support the NTA regarding the integration and linking of existing and proposed green cycle and pedestrian routes to settlements and villages. Secure bicycle parking to be provided at key locations, having due regard to environmental sensitivities such as sensitive human receptors, cultural heritage, European sites and biodiversity.

²⁹ Continue the development and provision of Active Travel infrastructure in the County through the NTA's Active Travel Programme, having due regard to environmental sensitivities such as sensitive human receptors, cultural heritage, European sites and biodiversity.

³⁰ Safe Routes to Schools (SRTS). Continue to work with An Taisce Green Schools and the NTA to encourage as many pupils and students as possible in primary and post-primary schools to walk and cycle to school, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites local air quality, cultural heritage etc.

³¹ Support the delivery and possible expansion of local bus services in the county, whilst advocating and exerting influence to ensure such projects promote climate action co-benefits and do not contravene relevant environmental protection criteria or cause significant negative environmental effects.

³² WCC shall develop a Fleet Management Plan in an effort to reduce our transport emissions in line with national target requirements, whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for Electric Vehicles; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.

³³ Ensure new commercial and residential estates are adequately serviced with surface water drainage infrastructure, e.g SUD's which meets the requirements of the Water Framework Directive, associated River Basin Management Plans and CFRAM Management Plans; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.

³⁴ WCC shall seek to continue to improve air quality throughout the county particularly regarding enforcement of smokey fuels legislation and liaising with the EPA regarding control and enforcement of discharge licences.



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 3.1⁹, 3.6¹⁰, 3.3¹¹ and DZ15¹⁴.

4.3.1.5.1 Climate change

The Draft LACAP is specifically focused on climate action and most of the actions within the plan are aimed at reducing carbon emissions and move towards renewable energy sources; 1.1³⁵, 1.4³⁶, 1.6³⁷, 1.8³⁸, 1.9³⁹, 1.11⁴⁰, 1.13⁴¹ and 1.14⁴² etc.

Therefore, there are no sources for significant effects to climate change factors identified within the Draft 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.

³⁵ Appoint a Climate Action Team to facilitate adaption and mitigation, to include a Climate Action Co-Ordinator, Officer & Community Officer. The Climate Action Team shall be assisted with representatives from across key functions of WCC.

³⁶ Ensure that climate action is listed as a standing item on the agenda at Management Team and relevant SPC meetings.

³⁷ Ensure alignment to National Climate Policy.

³⁸ Ensure that climate action policy is mainstreamed and translated into all WCC functional plans, strategies and projects.

³⁹ Commitment to implementation, monitoring and reporting of LACAP Actions.

⁴⁰ WCC will continue to promote green procurement in line with Westmeath County Council Procurement Procedures Manual.

⁴¹ WCC shall explore ways to actively reduce the organisational carbon footprint.

⁴² Liaise and engage with the Department of Housing Planning and Local Government and the Eastern and Midland Regional Assembly during the review process of the Westmeath County Development Plan to develop a coherent and sustainable approach to land use, consistent with the National Strategic Outcomes of the National Planning Framework and the Regional Strategic Outcomes of the Eastern and Midland Regional Spatial and Economic Strategy to help transition to a low carbon and climate resilient society.



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

Site Code	Site Name	Characterisation of Potential Effects
000216	River Shannon Callows SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, forestry, flooding, predation, hydrological interactions, waste management, direct interaction with species and populations through hunting, and recreation.</p>
000440	Lough Ree SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to burning, agricultural practices, forestry, invasive species, waste management, hydrological interactions, direct interaction with species and populations through fishing and hunting, antagonism arising from introduction of species, thermal heating of water bodies, inundation (natural processes), recreation and other direct land use practices.</p>
000448	Fortwilliam Turlough SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, forestry, hydrological interactions, and recreation.</p>
000571	Charleville Wood SAC	<p>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.</p> <p>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.</p>



Site Code	Site Name	Characterisation of Potential Effects
		The known threats and pressures for the SAC relate to forestry, direct interaction with species and populations through poaching, predator control, trapping, poisoning and taking or removal of terrestrial plants, and recreation.
000576	Fin Lough (Offaly) SAC	<p>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.</p> <p>Therefore mitigation measures are required to ensure no such impacts will affect the ecological integrity of the European site. These measures are detailed in section 5 below.</p> <p>The known threats and pressures for the SAC relate to burning, agricultural practices, forestry, hydrological interactions, biocenotic evolution, succession, waste management, direct interaction with species and populations through hunting, and recreation.</p>
000610	Lough Croan Turlough SAC	<p>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.</p> <p>Therefore mitigation measures are required to ensure no such impacts will affect the ecological integrity of the European site. These measures are detailed in section 5 below.</p> <p>The known threats and pressures for the SAC relate to agricultural practices.</p>
000611	Lough Funshinagh SAC	<p>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.</p> <p>Therefore mitigation measures are required to ensure no such impacts will affect the ecological integrity of the European site. These measures are detailed in section 5 below.</p> <p>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.</p>
000679	Garriskil Bog SAC	<p>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.</p> <p>Therefore mitigation measures are required to ensure no such impacts will affect the ecological integrity of the European site. These measures are detailed in section 5 below.</p>



Site Code	Site Name	Characterisation of Potential Effects
		The known threats and pressures for the SAC relate to burning, agricultural practices, forestry, invasive species, problematic native species, and hydrological interactions.
000685	Lough Ennell SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, forestry, hydrological interactions, waste management, direct interaction with species and populations through fishing and hunting, noise and light pollution, competition, recreation and other direct land use practices.</p>
000688	Lough Owel SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, forestry, hydrological interactions, waste management, direct interaction with species and populations through hunting, flightpaths, recreation and other direct land use practices.</p>
000692	Scragh Bog SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, invasive species, waste management, and other direct land use practices.</p>
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.



Site Code	Site Name	Characterisation of Potential Effects
		<p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices and mining.</p>
001810	White Lough, Ben Loughs and Lough Doo SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, waste management, direct interaction with species and populations through trapping, poisoning and poaching, and recreation.</p>
001831	Split Hills and Long Hill Esker SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, competition, succession, and other direct land use practices.</p>
001957	Boyne Coast and Estuary SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to lack of erosion, biocenotic evolution, succession, sediment removal, climatic conditions, invasive species, hydrological interactions, waste management, and other direct land use practices.</p>
002120	Lough Bane and Lough Glass SAC	<p>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.</p>



Site Code	Site Name	Characterisation of Potential Effects
		Therefore mitigation measures are required to ensure no such impacts will affect the ecological integrity of the Europeans site. These measures are detailed in section 5 below. The known threats and pressures for the SAC relate to agricultural practices and hydrological interactions.
002121	Lough Lene 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. 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. The known threats and pressures for the SAC relate to agricultural practices, waste management, and other direct land use practices.
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. 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. The known threats and pressures for the SAC relate to agricultural practices, forestry, aquaculture, invasive species, polderisation, pollution, eutrophication, hydrological interactions, waste management, direct interaction with species and populations through fishing and hunting, recreation and other direct land use practices.
002201	Derragh 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. 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. The known threats and pressures for the SAC relate to burning, forestry, invasive species, problematic native species, and hydrological interactions.
002205	Wooddown 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.



Site Code	Site Name	Characterisation of Potential Effects
		<p>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.</p> <p>The known threats and pressures for the SAC relate to burning, agricultural practices, forestry, invasive species, problematic native species, hydrological interactions, and waste management.</p>
002241	Lough Derg, North-East Shore SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, problematic native species, mining, hydrological interactions, waste management, climatic conditions, succession, eutrophication, recreation, and other direct land use practices.</p>
002313	Ballymore Fen SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, problematic native species, and waste management</p>
002336	Carn Park Bog SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, hydrological interactions, introduced genetic material, waste management, and other direct land use practices.</p>



Site Code	Site Name	Characterisation of Potential Effects
002337	Crosswood Bog SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to burning, agricultural practices, forestry, invasive species, hydrological interactions, introduced genetic material, waste management, and other direct land use practices.</p>
002339	Ballynamona Bog and Corkip Lough SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to agricultural practices, invasive species, hydrological interactions, and waste management.</p>
002340	Moneybeg and Clareisland Bogs SAC	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SAC relate to burning, agricultural practices, forestry, invasive species, hydrological interactions, waste management, direct interaction with species and populations through hunting, and other direct land use practices.</p>
002342	Mount Hevey Bog SAC	<p>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.</p> <p>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.</p>



Site Code	Site Name	Characterisation of Potential Effects
		The known threats and pressures for the SAC relate to agricultural practices, forestry, invasive species, paratism, hydrological interactions, waste management, and other direct land use practices.
004017	Mongan Bog SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices and mining.</p>
004043	Lough Derravaragh SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, forestry, direct interaction with species and populations through fishing and hunting, and recreation.</p>
004044	Lough Ennell SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, forestry, direct interaction with species and populations through fishing and hunting, recreation and other direct land use practices.</p>
004045	Glen Lough SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices and forestry.</p>



Site Code	Site Name	Characterisation of Potential Effects
004046	Lough Iron SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices and forestry.</p>
004047	Lough Owel SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, forestry, , hydrological interactions, direct interaction with species and populations through fishing and hunting, and recreation.</p>
004058	Lough Derg (Shannon) SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, direct interaction with species and populations through fishing and hunting, and recreation.</p>
004061	Lough Kinale and Derragh Lough SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, forestry, direct interaction with species and populations through fishing and hunting, and recreation.</p>



Site Code	Site Name	Characterisation of Potential Effects
004064	Lough Ree SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, forestry, invasive species, direct interaction with species and populations through fishing and hunting, and recreation.</p>
004065	Lough Sheelin SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, forestry, direct interaction with species and populations through fishing, and recreation.</p>
004077	River Shannon and River Fergus Estuaries SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, aquaculture, waste management, recreation and other direct land use practices.</p>
004080	Boyne Estuary SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to aquaculture, invasive species, hydrological interactions, waste management, direct interaction with species and populations through fishing, recreation and other direct land use practices.</p>



Site Code	Site Name	Characterisation of Potential Effects
004096	Middle Shannon Callows SPA	<p>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.</p> <p>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.</p> <p>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.</p>
004097	River Suck Callows SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices, forestry, direct interaction with species and populations through fishing and hunting, recreation and other direct land use practices.</p>
004102	Garriskil Bog SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to burning, agricultural practices, forestry, hydrological interactions, and other direct land use practices.</p>
004139	Lough Croan Turlough SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to agricultural practices.</p>



Site Code	Site Name	Characterisation of Potential Effects
004232	River Boyne and River Blackwater SPA	<p>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.</p> <p>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.</p> <p>The known threats and pressures for the SPA relate to hydrological interactions and other direct land use practices.</p>



5. MITIGATION MEASURES

This section outlines measures that have been incorporated into the Draft LACAP in order to mitigate against potential effects to European sites as identified above. The Draft 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 Draft LACAP. The mitigation measures most relevant to the protection of European sites are identified in Table 5-1 below⁴³. 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.

Some of the key text integrated into the Draft LACAP as a direct result of Strategic Environmental Assessment (SEA) and AA recommendations for the Draft LACAP are detailed on Table 5.2.

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 Draft LACAP were developed and then integrated into the Draft 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 Draft 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).

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

In addition to this, additional text clarifying environmental protection related obligations and environmental enhancement opportunities has been attached to a variety of defined actions in the plan. This text has been shaped to ensure that environmental considerations are appropriately taken into account during plan implementation. Again, 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.

⁴³ 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.



Environmental mitigation measures to be integrated into the Draft LACAP to prevent, reduce and fully offset any potential significant negative environmental effects, and to maximize potential environmental benefits and co-benefits of the Draft LACAP. The reader is asked to refer to the SEA ER Appendix 3.2 - Detailed Evaluation of Environmental Effects of Plan Implementation, for an understanding of the potential environmental effects associated with each individual action which are being mitigated (in the case of negative environmental effects) or maximized (in the case of positive environmental effects).

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



Table 5-1 : Recommendations integrated into the Plan

Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
2.2.	WCC will continue to implement active land management measures as defined in the masterplans and Town Centre First Plans and in line with Project Ireland 2040.	This action has the potential to support acquisition and re-development of vacant building or derelict sites. Development, regeneration or retrofitting works supported by this action has the potential to have a variety of unintended environmental effects, including noise, dust, traffic or biodiversity related effects, or effect on heritage features or the heritage context. Due regard should be given to Annex IV species which may be roosting in any structures which are to be developed.	WCC will continue to implement active land management measures as defined in the masterplans and Town Centre First Plans and in line with Project Ireland 2040, having due regard to all environmental sensitivities, and the need to appropriately protect heritage.
2.4.	Incorporate an Energy Survey and BER assessment as part of the process in returning Void properties to use.	<p>This action will support the reduction of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action has the potential to support the use of architectural and archaeological heritage 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. This action has the potential to have significant positive effects on population, land use and tourism.</p> <p>There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negative effect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p>	<p>Incorporate an Energy Survey and BER assessment as part of the process in returning Void properties to use;</p> <p>having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.</p>



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
2.5	WCC will strive to incorporate climate smart building and urban design performance outcomes on its new construction projects. Onsite renewable energy projects will be supported and prioritised in a bid to decarbonise thermal and electricity power requirements.	<p>This action will support the reduction of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action may support the development of renewable energy infrastructure in a community. Such infrastructure has the potential to have negative environmental effects, including, potentially, glint and glare impacts, construction related environmental effects, noise impacts and impacts on biodiversity.</p>	WCC will strive to incorporate climate smart building and urban design performance outcomes on its new construction projects. Onsite renewable energy projects will be supported and prioritised in a bid to decarbonise thermal and electricity power requirements; having due regard to the need to ensure renewable energy development forming part of this project will not have any significant negative environmental effect.
2.11.	Identify WCC lands that may be suitable for climate action initiatives and biodiversity enhancement and develop an Action & Enhancement Plan for suitable sites identified.	<p>The implementation of the action will have no real environmental effect when considered in isolation. The action will serve to promote development related climate action and the development of climate-positive development policies, causing potential positive effects on landuse.</p> <p>The action may support the development of on-site renewable energy infrastructure. Such infrastructure has the potential to have negative environmental effects, including, potentially, glint and glare impacts, construction related environmental effects, noise impacts and impacts on biodiversity.</p>	Identify WCC lands that may be suitable for climate action initiatives and biodiversity enhancement and develop an Action & Enhancement Plan for suitable sites identified; having due regard to the need to ensure renewable energy development supported by this action will not have any significant negative environmental effect.
2.21.	WCC shall develop a Fleet Management Plan in an effort to reduce our transport emissions in line with national target requirements, whilst ensuring energy/fuel used to power local authority alternative	<p>This action has the potential to lead to the development of additional electric charging infrastructure at local authority sites.</p> <p>In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have</p>	WCC shall develop a Fleet Management Plan in an effort to reduce our transport emissions in line with national target requirements, whilst ensuring energy/fuel used to power local authority alternative vehicles is sustainably



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
	vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for Electric Vehicles	<p>the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.</p> <p>This action will support the use of EV in the local authority organization and will underpin the reduction of GHG emissions associated with local authority vehicle fleet operations.</p>	sourced, and appropriate end-of-life management practices are in place for Electric Vehicles; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.
2.22.	Ensure new commercial and residential estates are adequately serviced with surface water drainage infrastructure, e.g SUD's which meets the requirements of the Water Framework Directive, associated River Basin Management Plans and CFRAM Management Plans.	<p>This action has the potential to have slight to significant positive environmental effects on water quality and hydrology and biodiversity.</p> <p>In the absence of mitigation, the construction of SuDS has the potential to result in some negative environmental effects on water quality (e.g. due to the run-off of soil or cement based material) or biodiversity (due to works impacting on water quality/aquatic ecology), for example.</p>	Ensure new commercial and residential estates are adequately serviced with surface water drainage infrastructure, e.g SUD's which meets the requirements of the Water Framework Directive, associated River Basin Management Plans and CFRAM Management Plans; having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, visual amenity and recreation and amenity value.
2.24	Build climate resilience and improve energy performance of architectural and archaeological heritage in public and private ownership through applicable schemes	<p>This action will support the reduction of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action has the potential to support the use of architectural and archaeological heritage structures which could result in significant negative effects if unmitigated. Any</p>	Build climate resilience and improve energy performance of architectural and archaeological heritage in public and private ownership through applicable schemes; having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		<p>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. This action has the potential to have significant positive effects on population, land use and tourism.</p> <p>There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negative effect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p>	
3.9.	Require proposals for new development to integrate with existing Green Infrastructure networks and contribute to the development and protection of overall Green Infrastructure assets.	<p>This action will promote the protection and further development of green infrastructure. The development of green infrastructure has the potential to have wide ranging slight to very significant positive effects on biodiversity, and slight to significant positive effects on water quality and hydrology.</p> <p>In absence of appropriate design and mitigation, the development of green infrastructure could potentially result in negative environmental effects, including negative construction related effects, negative effects on biodiversity.</p>	Require proposals for new development to integrate with existing Green Infrastructure networks and contribute to the development and protection of overall Green Infrastructure assets; having due regard to environmental sensitivities such as archaeology, European sites, biodiversity and amenity value.
4.7.	<p>WCC shall release a call for Expressions of Interest from community groups to help them to improve their capacity to respond to and recover from extreme weather events with specific aims to:</p> <ul style="list-style-type: none"> • help the vulnerable community to develop a stronger facilitating role for mitigating risks 	<p>This action will promote good flood risk management and flood risk reduction. It will reduce the risk of buildings being damaged due to flooding thus reducing the amount of repairs needed on these buildings reducing the amount of GHG's emitted.</p> <p>The progression of minor flood resilience related action has the potential to lead to minor development taking place at and in the vicinity of water bodies.</p>	<p>WCC shall release a call for Expressions of Interest from community groups to help them to improve their capacity to respond to and recover from extreme weather events with specific aims to:</p> <ul style="list-style-type: none"> • help the vulnerable community to develop a stronger facilitating role for mitigating risks • provide advice on the risk of extreme events affecting their locality



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
	<ul style="list-style-type: none"> provide advice on the risk of extreme events affecting their locality devise mitigating actions to enhance preparedness provide support to develop appropriate resilience arrangements to enable response and recovery 	<p>Such minor works has the potential to have slight to moderate, negative effects on the water environment and biodiversity, including flora and fauna.</p> <p>It is unlikely such minor works will have a significant effect on the local air quality, noise and human environment given the likely scale, extent and duration of such works.</p>	<ul style="list-style-type: none"> devise mitigating actions to enhance preparedness provide support to develop appropriate resilience arrangements to enable response and recovery <p>Ensuring the programme is designed and implemented to include Sustainable Urban Drainage Systems (SUDS) / nature-based solutions/ protection of biodiversity and avoidance of habitat fragmentation.</p>
4.8.	WCC LEO will actively promote hot desking and e-working facilities in the county and will work in conjunction with providers of these facilities.	This action will reduce commuter journey times and reduce the need for more buildings thus reducing GHG's. In the absence of any mitigation, the development of such large-scale infrastructural projects associated with this action have the potential to generate a wide variety of negative environmental effects - that range from slight in magnitude to profound - on, ecological receptors, the soils and geological environment, and water quality.	Westmeath County Council LEO will actively promote hot desking and e-working facilities in the county and will work in conjunction with providers of these facilities having appropriate regard to relevant planning and environmental protection criteria.
5.8.	WCC shall consider the development of a Regional Renewable Energy Strategy in partnership with the Midland CARO Sub-Group for the generation of renewable energy.	This promotional action will support the effective delivery of climate action in the community. The adoption of this action will support the full realization of the plan vision in the community. Construction associated with the development of energy efficiency upgrades or small-scale renewable energy development supported by this programme has some potential to have negative effects - such as localized impacts on biodiversity, habitats, noise effects and air quality in the absence of mitigation.	WCC shall consider the development of a Regional Renewable Energy Strategy in partnership with the Midland CARO Sub-Group for the generation of renewable energy; having due regard to environmental sensitivities such as Archaeology, European sites, biodiversity and amenity value etc.



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
5.9.	Support, in line with the policies of the County Development Plan, initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources in an environmentally acceptable manner.	<p>This action has the potential to contribute to the creation of slight to significant positive environmental effects on climate, biodiversity, water quality and hydrology, and local air quality.</p> <p>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.</p>	<p>Support, in line with the policies of the County Development Plan, initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources in an environmentally acceptable manner.;</p> <ul style="list-style-type: none"> -having due regard to 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.
5.11.	Channel Maintenance and Flood alleviation measures shall continue to be carried out in conjunction with the OPW.	<p>The progression of flood resilience related action has the potential to lead to significant development taking place at and in the vicinity of water bodies.</p> <p>In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), the receiving noise environment (due to the generation of construction phase noise).</p>	Channel Maintenance and Flood alleviation measures having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology etc.



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		<p>Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SuDS as part of a flood resilience scheme has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.</p> <p>The delivery of flood resilience action also has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including ecological receptors.</p>	
DZ05	Support any programmes organised by external bodies to supply training for labourers/contractors re retrofitting skills.	<p>The implementation of the action will have no real environmental effect when considered in isolation. The action will serve to promote organisational climate action and the development of climate-positive policies.</p> <p>There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negative effect the appropriate conservation of protected structures.</p> <p>Therefore there is also scope for there to be negative effects if unmitigated.</p> <p>This activity has the potential to adversely effect Annex II and IV species such as Daubenton's Bat through disturbance and habitat loss or impact protected structures if incorrectly implemented.</p>	Support any programmes organised by external bodies to supply training for labourers/contractors re retrofitting skills having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.
DZ07	Assist and support the creation of Community EV charging farms and promotion of active travel, modal shifts.	<p>This action has the potential to increase the uptake in Electric Vehicles and will support a modal shift and reduction in vehicle related GHG emissions.</p> <p>The expansion of the EV and consequently EV charging network will lead to the development of multiple charging</p>	Assist and support the creation of Community EV charging farms and promotion of active travel, modal shifts having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		<p>points and ancillary electrical infrastructure including grid connection routes across the extent of the local authority's functional area.</p> <p>In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.</p> <p>The delivery of good network of charging infrastructure has the potential to promote the use of sustainable travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p>	<p>appropriately protect and conserve protected structures.</p>
DZ08	<p>WCC will aim to become an exemplar regarding deep retrofitting of WCC owned historic/protected structures in the DZ.</p>	<p>This action will support the local authority reducing its organizational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negative effect the appropriate conservation of protected structures.</p>	<p>WCC will aim to become an exemplar regarding deep retrofitting of WCC owned historic/protected structures in the DZ having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.</p>



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		<p>Therefore there is also scope for there to be negative effects if unmitigated.</p> <p>This activity has the potential to adversely effect Annex II and IV species such as Daubenton's Bat through disturbance and habitat loss or impact protected structures if incorrectly implemented.</p>	
DZ10	WCC building stock including LA housing energy efficiency upgrades. All WCC buildings (excl LA Housing)to have EMS installed.	<p>This action will support the local authority reducing its organizational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negative effect the appropriate conservation of protected structures. Therefore there is also scope for there to be negative effects if unmitigated.</p> <p>This activity has the potential to adversely effect Annex II and IV species such as Daubenton's Bat through disturbance and habitat loss or impact protected structures if incorrectly implemented.</p>	WCC building stock including LA housing energy efficiency upgrades. All WCC buildings (excl LA Housing)to have EMS installed having due regard to environmental sensitivities such as local human receptors, European sites and biodiversity, and the need to appropriately protect and conserve protected structures.
DZ11	WCC will continue with the Pathfinder programme with regards to WCC buildings in the DZ.	This action will support the local authority in reducing its organizational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be	WCC will continue with the Pathfinder programme with regards to WCC buildings in the DZ having due regard to environmental sensitivities such as Archaeology, European sites, biodiversity and amenity value etc.



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		supported via this action relative to national GHG emission reduction targets and requirements.	
DZ12	WCC will explore installing renewable energy sources in all it's building stock in the DZ. District heating options should be considered in DZ.	<p>This action will support the local authority reducing its organizational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.</p> <p>This action may support the development of on-site renewable energy infrastructure at local authority sites. The development of PV panels on Council buildings has the potential to result in negative glint and glare impacts on sensitive environmental receptors.</p>	WCC will explore installing renewable energy sources in all it's building stock in the DZ. District heating options should be considered in DZ where it is confirmed through appropriate environmental assessment that associated renewable energy development will not have any significant environmental effect.
DZ14	Active travel and providing safe travel routes for both cyclists and pedestrians will be prioritised including secure parking facilities for bicycles. Safe links from canal and Greenways into DZ town centre shall be provided.	<p>This action supports the development of additional cycling infrastructure.</p> <p>In the absence of any mitigation, works involved in the construction of additional cycling infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), biodiversity impacts and cultural heritage asset impacts.</p> <p>The delivery of an expanded safe active travel network has the potential to promote the use of sustainable and active travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is</p>	Active travel and providing safe travel routes for both cyclists and pedestrians will be prioritised including secure parking facilities for bicycles. Safe links from canal and Greenways into DZ town centre shall be provided having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage etc.



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		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.	
DZ15	<p>Consideration should be given to protecting, promoting and maximising the opportunities in relation to biodiversity, green corridors, hedgerows and green spaces within the DZ and use these areas to full potential for carbon sequestration and quality of life. An assessment of current green & open spaces in the DZ should be undertaken and potential regarding tree planting, dedicated wastelands etc should be explored.</p> <p>Consider public lighting levels at night time in Town Centre and the seek to minimise the impact on Biodiversity.</p>	<p>The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna.</p> <p>This action will promote the protection and enhancement of native hedgerow and has the potential to generate slight to significant effects for biodiversity in the county. The enhancement of green corridors, hedgerows and green spaces may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions. The enhancement of green corridors, hedgerows and green spaces may create flight corridors for bats and nesting habitats for birds.</p>	<p>Consideration should be given to protecting, promoting and maximising the opportunities in relation to biodiversity, green corridors, hedgerows and green spaces within the DZ and use these areas to full potential for carbon sequestration and quality of life. An assessment of current green & open spaces in the DZ should be undertaken and potential regarding tree planting, dedicated wastelands etc should be explored.</p> <p>Consider public lighting levels at night time in Town Centre and the seek to minimise the impact on Biodiversity having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality, cultural heritage; and prioritising the use of native species.</p>
DZ17	<p>Permeable surfaces should be prioritised especially in public car parking facilities in the DZ. Planning will explore conditioning suitable areas as having permeable surfacing.</p>	<p>This action has the potential to result in wide ranging slight to significant positive environmental effects on the reduction of floods, improvement on the water quality, hydrology and biodiversity.</p> <p>The construction of SuDS has the potential to result in some negative environmental effects on water quality (e.g. due to the run-off of soil or cement based material) or biodiversity</p>	<p>Permeable surfaces should be prioritised especially in public car parking facilities in the DZ. Planning will explore conditioning suitable areas as having permeable surfacing. Ensure all related construction works are designed and implemented in a manner that does not result in</p>



Action Reference	Original Action	Potentially Significant Adverse Effect, if Unmitigated, including:	Recommendations integrated into the Plan, included in:
		(due to works impacting on water quality/aquatic ecology), for example.	the occurrence of significant adverse environmental effects.



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

Ref	Environmental Governance Principles
EG1	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.
EG2	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.
EG3	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.
EG4	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.
EG5	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.
EG6	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.
EG7	Promote climate action projects that support protected trees, hedgerows and other habitats such as wetlands, floodzones which contribute to green infrastructure.
EG8	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.
EG9	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.
EG10	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 Draft Westmeath Local Area Climate Action Plan 2024-2029 has been carried out. Implementation of the Draft 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 Draft 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 Draft LACAP either alone or in-combination with other plans/projects.

Having incorporated mitigation measures, it is concluded that the Draft Westmeath Local Area 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 projects⁴⁴. This evaluation is made in view of the conservation objectives of the habitats or species, for which these sites have been designated.

The AA process is ongoing and will inform and be concluded at adoption of the Plan.

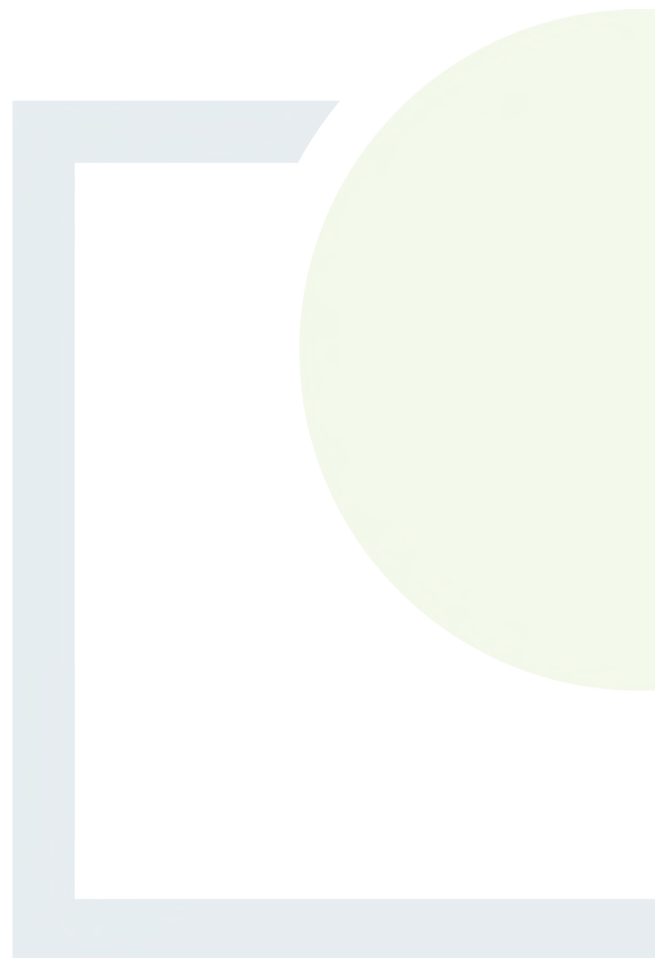
⁴⁴ Except as provided for in Article 6(4) of the Habitats Directive, viz. There must be: a) no alternative solution available, b) imperative reasons of overriding public interest for the plan to proceed; and c) Adequate compensatory measures in place.



CONSULTANTS IN ENGINEERING,
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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
000571	Charleville Wood SAC	The woodland is one of a very few ancient woodlands in Ireland with some parts undisturbed for at least 200 years. Notable for its size and the occurrence of several rare insect species particularly <i>Mycetobia obscura</i> . The lake attracts locally to regionally important numbers of waterfowl. The site supports a large population of the rare snail <i>Vertigo moulinsiana</i> .	A large oak woodland on deep glacial deposits surrounded by estate parkland and agricultural grassland. Site includes a small lake partially overgrown by reed swamp with a wooded island and a stream bordering the western site margin.
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 (<i>Rhynchosporion</i>). Much of the bog surface is wet and has a moderate to high cover of <i>Sphagnum</i> moss. It supports <i>Rhynchospora fusca</i> 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.
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 <i>Rorippa islandica</i> - a turlough speciality. The wintering waterfowl numbers are moderate and the site is especially useful to dabbling duck. Also has breeding wildfowl including <i>Anas clybeata</i> and <i>Aythya-ferina</i> both Red Data Book species.	Lough 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 <i>Podiceps Nigricollis</i> 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 (CaCo_3) deposition and is surrounded by pastures.



Site Code	Site Name	Quality of Site	Other Site Characteristics
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 <i>Orchis morio</i> 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 <i>Corylus avellana</i> / <i>Fraxinus excelsior</i> woodland scrub improved grassland and gravel pit are also included in the site.
001810	White Lough Ben Loughs and Lough Doo SAC	Although small this is a good example of an oligotrophic system which is not showing any obvious signs of eutrophication. Noted for its diversity of marginal wetland vegetation. Interest of site is increased by presence of <i>Austropotamobius pallipes</i> and <i>Lutra lutra</i> .	Site is on the headwaters of the River Deel and close to Loughs Bane and Lene. It is situated in a narrow poorly drained valley. Comprises a chain of interlinked lakes of which White Lough is the largest. Lakes are surrounded by wetland vegetation which includes <i>Phragmites</i> swamp <i>Cladium</i> swamp and wet woodland. Some dry broad-leaved woodland is within the site.
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 <i>Tursiops truncatus</i> in Ireland all three Irish species of lamprey and a good population of <i>Salmo salar</i> . A number of birds listed on the EU Birds Directive either winter or breed in the site. The site is internationally important for waterfowl with more than 50000 individuals occurring in winter. Several species listed in the Irish Red Data Book are present perhaps most notably the only known Irish populations of <i>Scirpus triquetus</i> .	A very large long site approximately 14 km wide and 120 km long encompassing: the drained river valley which forms the River Shannon estuary; the broader River Fergus estuary plus a number of smaller estuaries e.g. Poulnasherry Bay; the freshwater lower reaches of the Shannon River between Killaloe and Limerick plus the freshwater stretches of much of the Feale and Mulkear catchments; a marine area at the mouth of the Shannon estuary with high rocky cliffs to the north and south; ericaceous heath on Kerry Head and Loop Head; and several lagoons. The underlying geology ranges from Carboniferous limestone (east of Foynes) to Namurian shales and flagstones (west of Foynes) to Old Red Sandstone (at Kerry Head). The salinity of the system varies daily with the ebb and flood of the tide and with annual rainfall fluctuations seasonally.
002203	Girley (Drewstown) Bog SAC	The Degraded Raised Bog in Girley (Drewstown) Bog SAC is of conservation significance as it has the potential for restoration to Active Raised Bog which is a priority habitat in the EU and one that is scarce and under threat in Ireland. Despite the relatively small area of Degraded Raised Bog present the restoration actions have resulted in active redevelopment of the habitat towards Active Raised Bog which add significantly to the diversity and scientific value of the site. The site is being actively managed for conservation as part of the Coillte EU LIFE	Girley (Drewstown) Bog (002203) consists of 32.26 ha of raised bog (15.05 ha of high bog and 17.21 ha of cutover bog) which occupies the south-western part of Girley Bog NHA (001580). Girley Bog is a Midland type raised bog developed in a basin. The SAC is bounded by open high bog on its northern and eastern sides by agricultural land on its western side and by cutover bog with forestry on its southern side. Most of the SAC and all of the high bog included in the SAC was completely covered by coniferous forestry which has been recently clear-felled as part of the restoration



Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>Project and most of the required restoration measures have already been carried out. However some significant threats remain and an After LIFE management plan is being developed for the future conservation management of the SAC. The SAC is located within the raised bog Girley Bog NHA (001580) the conservation management of which should support the maintenance and improvement of Degraded Raised Bog in the SAC. It is estimated that restoration works carried out on the SAC will in turn benefit the conservation of 0.5 ha of Active Raised Bog and the restoration of 0.5 ha of Degraded Raised Bog in the adjacent area of Girley Bog NHA (001580).</p>	<p>program for the site. Most of the conifers in the SAC were removed and the associated intensive drainage system was blocked by 2013 as part of an EU LIFE funded Coillte project (Demonstrating Best Practice in Raised Bog Restoration in Ireland) so as to raise the water table and restore Active Raised Bog (ARB) on the site. With the clear-felling of conifers and blocking of drains water-levels have risen and remain high throughout most of the year. As a consequence raised bog vegetation including typical sphagnum species has returned to the wetter areas of the high bog. Overall the high bog appears to be re-wetting with limited areas of wet flats and hummock/hollows. However the majority of the restored areas have not yet developed vegetation characteristic of the wettest conditions and there is a considerable amount of conifer and birch regeneration occurring in these areas. Two areas in the north-east of the site covering 2.28 ha have been identified by hydrological modelling as Degraded Raised Bog (7120) (DRB) habitat. They now have standing surface water in the hollows and pools for most of the year with considerable areas of rapidly regenerating bog mosses. These wet areas with regenerating Sphagnum moss are expected to develop into Active Raised Bog habitat within 20 years. However to ensure that these areas reach their full potential it will be necessary to block the boundary drains in consultation with other stakeholders. The cutover bog to the south of the site is generally drier and is developing into wet and dry woodland dominated currently by Downy Birch scrub with occasional conifers from the former plantation. Cherry Laurel Rhododendron and conifers are regenerating strongly in this area and are subject to ongoing control programs.</p>
002339	Ballynamona Bog and Corkip Lough SAC	<p>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</p>	<p>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</p>



Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>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. 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 <i>Eurycercus glacialis</i> and the wetland plant <i>Teucrium scordium</i>. In general this site ranks as one of the most diverse and species-rich small sites in Co. Roscommon.</p>	<p>Lough fluctuates markedly throughout the year and during the summer the water level drops revealing a species-rich wetland flora.</p>
004064	Lough Ree SPA	<p>Lough Ree is one of the most important Midland sites for wintering waterfowl with nationally important populations of <i>Anas penelope</i>, <i>Anas crecca</i>, <i>Anas acuta</i>, <i>Anas clypeata</i>, <i>Aythya fuligula</i> and <i>Bucephala clangula</i>. Nationally important populations of <i>Pluvialis apricaria</i> and <i>Vanellus vanellus</i> are also associated with the lake. Regionally important numbers of <i>Cygnus cygnus</i> and <i>Anser albifrons flavirostris</i> are also found in the vicinity of the lake. The site supports a nationally important population of <i>Sterna hirundo</i>. <i>Larus ridibundus</i> breeds (nationally important) and <i>Larus fuscus</i> and <i>Larus canus</i> have bred in the past (recent census information is poor). Lough Ree is an important site for breeding duck and grebes with <i>Aythya fuligula</i> and <i>Podiceps cristatus</i> having populations of national importance. Of particular note is that it is one of the two main sites in the country for breeding <i>Melanitta nigra</i> a Red Data Book species. The woodland around the lake is a stronghold for <i>Sylvia borin</i> and this scarce species probably occurs on some of the islands within the SPA. <i>Lutra lutra</i> is frequent within the site and the fish <i>Coregonus autumnalis pollan</i> occurs.</p>	<p>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. 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 <i>Phragmites australis</i> 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.</p>



Site Code	Site Name	Quality of Site	Other Site Characteristics
004065	Lough Sheelin SPA	Despite very variable water quality in recent decades Lough Sheelin remains a very important site for wintering waterfowl and especially diving duck. It supports nationally important populations of four species: <i>Podiceps cristatus</i> <i>Aythya ferina</i> <i>Aythya fuligula</i> and <i>Bucephala clangula</i> . A range of other species occur in relatively low numbers including <i>Cygnus olor</i> <i>Anas platyrhynchos</i> and <i>Fulica atra</i> .	Lough Sheelin is a medium- to large-sized lake with a maximum length of 7 km. The lake lies at the top of the Inny River a main tributary of the River Shannon. It is a typical limestone lake and is fairly shallow (maximum depth 14 m). The trophic status of the lake has varied greatly since the 1970s due to pollution from mainly agricultural sources. It was recently (1998-2000) classified as a highly eutrophic system. Swamp vegetation occurs along parts of the shoreline. There are some very small offshore islands which are mostly wooded. The lake was formerly one of the top trout fisheries in the country.
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 <i>Calidris alpina</i> <i>Limosa limosa</i> and <i>Tringa totanus</i> . A further 16 species have populations of national importance. The site is particularly significant for <i>Calidris alpina</i> (11% of national total) <i>Pluvialis squatarola</i> (7.5% of total) <i>Vanellus vanellus</i> (6.5% of total) <i>Tringa totanus</i> (6.1% of total) and <i>Tadorna tadorna</i> (6.0% of total). It has <i>Cygnus cygnus</i> <i>Pluvialis apricaria</i> and <i>Limosa lapponica</i> in significant numbers. The site was formerly frequented by a population of <i>Anser albifrons flavirostris</i> 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 <i>Macoma-Scrobicularia-Nereis</i> community which provides a rich food resource for the wintering birds. Eelgrass (<i>Zostera</i> 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 <i>Phragmites australis</i> and <i>Scirpus</i> spp. <i>Spartina anglica</i> is frequent in parts.
000006	Killyconny Bog (Cloghbally) SAC	Killyconny Bog is a rather small raised bog site located in the north-east of the country. The site contains good examples of the priority Annex I habitat active raised bog and the non-priority habitat degraded raised bog (capable of regeneration). The uncut high bog area is surrounded by extensive cutover surfaces and a portion of this cutover has been planted with conifers.	The underlying geology of this site consists of lower paleozoic shales and grits which generally have a low permeability with clays and clayey limestone tills dominating the subsoils. The bog consists of two small peat basins which have fused over a low drumlin ridge.



Site Code	Site Name	Quality of Site	Other Site Characteristics
		Although the site is rather damaged at present due to drainage effects it remains one of the largest extant areas of relatively intact raised bog in the north-east of the country and thus is of considerable ecological and biogeographical importance.	
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 <i>Vertigo Geyeri</i> and is also important for <i>Chrysogaster macquarti</i> and <i>Platycheirus perpallidus</i> .	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.
000679	Garriskil Bog SAC	Garriskil Bog SAC is a site of considerable conservation significance comprising two subsites Garriskil Bog and Derrya Bog which contain raised bog a rare habitat in the EU and one that is becoming increasingly scarce and under threat in Ireland. It contains good examples covering significant areas of the EU Habitats Directive Annex I habitats Active Raised Bog (7110) Degraded Raised Bog (7120) which is being restored to the priority Annex 1 habitat Active raised bog (7110) and Depressions on peat substrates of the Rhynchosporion (7150). The site already supports a large area of high quality raised bog microhabitats which is unusual for a site in the east Midlands including some very well developed hummock/hollow complexes and has a large area with the potential for restoration to Active Raised Bog.	Garriskil Bog SAC (347.71 ha) consists of two raised bog sites. The main area is Garriskil Bog which covers 324.81 ha and lies 3 km east of Rathowen in Co. Westmeath A small outlier Derrya Bog covers 22.90 ha and lies 2.2 km to the east of Garriskil on the northern shore of Lough Derravaragh. Both bogs are remnants of the large river floodplain bogs which developed where the River Inny enters and leaves Lough Derravaragh. Garriskil Bog is considered to be an excellent example of a Midland raised bog and it includes 170.26 ha of uncut raised bog and 154.55 ha of surrounding hinterland which includes 109 ha of cutover bog. Derrya Bog which is part of Lough Derravaragh Bog NHA (000684) has been restored as part of an EU LIFE project. The site consists of 2.5 ha of high bog and 20.4ha of cutover most of which was afforested in the 1970s.



Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>Although the Derrya Bog subsite of the SAC is small (22.3 ha) and lacks annex habitats it has been restored and has the potential to support the retention of Active Raised Bog and the restoration of Degraded Raised Bog to Active Raised Bog in Lough Derravaragh Bog NHA (000684). 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.</p>	<p>All the conifer plantations were recently clear-felled and restored by drain-blocking. The bedrock geology of both sites is carboniferous limestone. Garriskil Bog is a large raised bog with 51.7% of the original bog still present. It contains a large wet high quality central core of Active Raised Bog (ARB) amounting to 50.87ha. There are extensive well developed systems of pools and hummocks present. Outside the Active Raised Bog area pool complexes are rare and where they do occur they tend to be dominated by shallow open water or algal mats. In a number of places the high bog is being invaded by Downy Birch (<i>Betula pubescens</i>) and pines. The large areas of old cutover bog provides an additional habitat where Purple Moor-grass and Heather dominate along with cottongrasses while in some parts Downy Birch woodland is developing. Along the north-east margin of the high bog a narrow band of fen-grassland occurs. Past drainage of the bog associated with arterial drainage of the Inny and Riffey rivers and peat cutting has unfavourably impacted on the site and lead to widespread subsidence and drying out. The northern area of the site was also affected in the 1990s by intensive surface drainage which directly affected the area of Active Raised Bog reducing it from 71.23 to 45.12 ha. Those drains were blocked by NPWS in the late 1990s and by 2014 the area of Active Raised Bog had increased by 5.75 ha to 50.87 ha. There has been no turf cutting since the 1990s and though burning has caused damage in the past there has been no severe fire in recent years. Grazing cattle have caused some local poaching damage to the bog surface. The Derrya outlier is within Lough Derravaragh Bog NHA (000684). Lough Derravaragh Bog is a remnant of a larger area of bog much of which has now been cutover and reclaimed for forestry and agriculture with only 48 ha (approximately 40%) of high bog remaining. A small area of Active Raised Bog habitat (4.61 ha) is present and based on hydrological modelling an area of 2.1 ha is considered to be Degraded Raised Bog. In Derrya Bog both the high bog and cutover were planted with a closed canopy plantation of Sitka Spruce (<i>Picea sitchensis</i>) in the 1980s. This conifer plantation was clear-felled in 2011 and the drains were blocked with peat dams in 2013 as part of an EU LIFE project.</p>



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			<p>As a consequence water-levels have risen and some raised bog vegetation has returned to the wetter areas of the high bog. These areas contain Ling Heather Hare’s tail Cotton-grass (<i>Eriophorum vaginatum</i>) Bilberry Purple Moor-grass and Tormentil (<i>Potentilla erecta</i>) with the Bog mosses <i>Sphagnum palustre</i> and in the wet drains <i>Sphagnum recurvum</i>. There is some scattered Birch and Sitka Spruce regenerating and these are being controlled. On the cutover now that the conifers have been clear-felled it is expected that most of this area will develop into dry native broadleaf woodland but 4.5 ha may be wet enough to support Wet Birch woodland and 1.44 ha of Alder (<i>Alnus glutinosa</i>) - Willow (<i>Salix</i> spp.) woodland along the western cutover. A site specific restoration plan has been developed for Garriskil Bog SAC to help meet the national conservation objectives for raised bogs. One of the key objectives of that plan is to restore the area of Active Raised Bog to 84.9 ha. The area of Active Raised Bog was reported as 50.9 ha during the latest monitoring survey (Fernandez et al 2014a) and it has been concluded that there is 31.6 ha of Degraded Raised Bog on the high bog which can be restored to Active Raised Bog with the appropriate restoration measures. There is also long-term potential for 2.4 ha of bog peat-forming habitats (BPFH) to develop if restoration measures are undertaken on cutover areas. Detailed conservation objectives have yet to be developed for the Derrya Bog subsite of the SAC but will be produced as part of the restoration plan for the Lough Derravaragh Bog NHA site. Derrya 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. Garriskil Bog is part of the current NPWS Restoring Active Raised Bog in Irelands SAC Network 2016-2020 (LIFE NAT/IE/000032).</p>



Site Code	Site Name	Quality of Site	Other Site Characteristics
000692	Scragh Bog SAC	A small but exceptionally fine example of fen habitat with transitions to transition mire fen carr and ombrotrophic bog. Very little disturbance and in a near-natural condition the site contains a rich diversity of species including 3 Red Data plants several national rarities and an interesting invertebrate fauna. Probably the best example of its type in Ireland.	This area is a wet transition mire with a floating root mat developed in a small oval shaped depression. The fen is fed by weak surface springs and drains by an artificially defined outlet. The surrounding lands are agricultural grasslands primarily used for cattle grazing.
001625	Castlesamps on 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 <i>Erigeron acer</i> a Red Data Book species is found in the three gravel pits on the site. The protected <i>Acinos arvensis</i> 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.
001957	Boyne Coast and Estuary SAC	While the site has a good diversity of coastal habitats including fixed dunes most have been modified in some way. The containment of the main tidal channel has altered the tidal pattern which affects the functioning of the various estuarine habitats. Both dune systems were formerly far more extensive but much of the stable areas have now been converted to golf courses. Site is important for wintering waterfowl supporting nine species in nationally important numbers including <i>Pluvialis apricaria</i> an Annex I EU Birds Directive species. <i>Sterna albifrons</i> breeds or attempts to breed in most years.	This moderately sized coastal site which is situated below the town of Drogheda comprises most of the estuary of the Boyne River a substantial river which drains a large catchment. On the seaward side the site extends north and south for several kilometres to include the remaining intact areas of dune systems at Baltray and Mornington as well as the adjacent beaches and intertidal sand flats. The main channel of the Boyne is contained by training walls for navigable purposes. As well as intertidal sand and mud flats the inner part of the site has salt marshes and <i>Spartina</i> swards.
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 <i>Sphagnum</i> lawns. The diversity of <i>Sphagnum</i> species is notably high and includes the nationally rare <i>Sphagnum pulchrum</i> .	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. Part of the cutover bog has been invaded by <i>Betula pubescens</i> scrub. Further afforestation occurs adjacent to the site.



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		<p>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.</p>	
002342	Mount Hevey Bog SAC	<p>Mount Hevey Bog is one of the most easterly relatively intact raised bogs in Ireland and represents one of the largest bog areas in the eastern half of the country. Although more than half of the site area consists of cutover bog there is a large area of active raised bog. The active areas support well-developed pool areas and have a high Sphagnum cover which include the rare species <i>Sphagnum fuscum</i> and <i>S. imbricatum</i>. A soak area which has developed from an infilled lake and now supports some <i>Betula pubescens</i> trees adds diversity to the bog surface. A substantial area of uncut high bog that is classified as degraded raised big is present. The degraded bog supports a wide range of plant communities depending on factors such as height of water table and past burning events. The bog and especially the active parts contains substantial areas of <i>Rhynchosporion</i> vegetation which have a typical species composition and generally exist in a well-preserved condition. The cutover areas which surround the high bog contain large areas of scrub woodland dominated by <i>Betula pubescens</i>.</p>	<p>Mount Hevey is a large midland raised bog which is situated 3 km north-east of Kinnegad village and lies on the border of counties Meath and Westmeath. The bog overlies Carboniferous limestone bedrock and occurs in four sections. Two of these are small and lie to the north of a railway line while two larger lobes lie to the south of the railway line. These two larger lobes are of higher ecological value due to the presence of active bog. Cutover bog surrounds the uncut high bog. Part of the high bog and also part of the cutover has been afforested with conifers. Other parts of the cutover has been invaded by <i>Betula pubescens</i> scrub and small amounts of broad-leaved woodland. Some of the cutover has been converted to semi-improved grassland.</p>
004045	Glen Lough SPA	<p>The main importance of this site is that it is used (along with Lough Iron and other sites) at times by an internationally important population of <i>Cygnus cygnus</i>. At times the site is utilised by the internationally important midland lakes population of <i>Anser albifrons flavirostris</i> although usage of the site is not regular. It has a range of other waterfowl species mainly dabbling duck but in relatively low numbers. The <i>Anas clypeata</i> populations at times exceeds the qualifying threshold for national importance.</p>	<p>Glen Lough had practically no surface water owing to extensive drainage in the 1960s which resulted in a dramatic drop in the water table. However the area does flood in the winter months. Since 2005 there has been active management of the site to retain water including the construction of embankments. Sedge-dominated freshwater marsh now occupies the majority of the site with species such as <i>Carex rostrata</i> and <i>Phalaris arundinacea</i> present. Other habitats present include reedswamp wet and dry grassland cutaway bog colonised by heath vegetation scrub and wet willow woodland.</p>



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004058	Lough Derg (Shannon) SPA	<p>Lough Derg is of importance for both breeding and wintering birds. The islands support nationally important breeding colonies of <i>Sterna hirundo</i> <i>Phalacrocorax carbo</i> <i>Podiceps cristatus</i> and probably <i>Aythya fuligula</i>. It is a traditional site for nesting <i>Larus ridibundus</i> but there is no recent survey information. In winter the lake is particularly important for diving ducks with nationally important populations of <i>Aythya fuligula</i> and <i>Bucephala clangula</i> occurring. <i>Cygnus olor</i> also has a population of national importance whilst a range of other species occur in lesser numbers including <i>Cygnus cygnus</i> <i>Anas crecca</i> <i>Fulica atra</i> and <i>Vanellus vanellus</i>. A flock of <i>Anser albifrons flavirostris</i> has traditionally used the site where they feed on grassy islands but birds have seldom been recorded in recent years.</p>	<p>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.</p>
004096	Middle Shannon Callows SPA	<p>This site is the largest area of semi-natural floodplain grassland in Ireland and has very many features of a natural ecosystem. Along with its main tributaries the River Suck and River Brosna it represents one of the most important wetland systems in the country. It is of International Importance for wintering waterfowl as numbers regularly exceed the 20000 threshold (mean of 34985 for the 5 winters 1994/94-1998/99). Of particular note is the presence of an Internationally Important population of <i>Cygnus cygnus</i>. A further five species have populations of national importance: <i>Cygnus olor</i> <i>Anas penelope</i> <i>Pluvialis apricaria</i> <i>Vanellus vanellus</i> and <i>Limosa limosa</i>. There is a well documented spring passage of <i>Limosa limosa</i> along the river valley. The Shannon callows are also of high importance for breeding birds. In particular it has the largest concentration of <i>Crex crex</i> in Ireland. Since 1991 a conservation programme involving annual monitoring of population size practical habitat management and publicity has been in operation. <i>Coturnix coturnix</i> a very rare species</p>	<p>The site follows the River Shannon from Athlone just below Lough Ree to Portumna just above Lough Derg a distance of over 50 km. It includes much of the flood plain of the river varying in width from approximately 0.5 km to up to 1.5 km in places. A weir at Meelick divides the flooding regime. The main habitat present is humid grassland improved to varying extents that is seasonally flooded. The less improved areas are species-rich. The grassland is used mainly for pasture but some is used for hay-making. The river channel is fringed by swamp and marsh vegetation. There is an extensive system of drainage channels many of which support a diverse flora. The callows often border raised bogs some of which are still intact.</p>



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		<p>in Ireland also breeds in the grasslands. Several wader species notably <i>Vanellus vanellus</i> <i>Gallinago gallinago</i> and <i>Tringa totanus</i> have important breeding populations though these have declined substantially since the 1980s. The scarce breeding species <i>Anas clypeata</i> nests in small numbers each year. The callows is one of the very few sites in Ireland where <i>Limosa limosa</i> has bred. The habitats also support a range of ground nesting passerine species notably <i>Locustella naevia</i> and <i>Alauda arvensis</i>. In autumn and winter <i>Circus cyaneus</i> is a regular visitor.</p>	
000216	River Shannon Callows SAC	<p>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 <i>Leucojum aestivum</i> <i>Sium latifolium</i> <i>Botrychium lunaria</i> and <i>Lemna gibba</i>. 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 <i>Anser albifrons flavirostris</i> 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 <i>Calidris alpina</i>.</p>	<p>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 <i>Molinia</i> meadows.</p>



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		<p>It is the top site in the country for <i>Cygnus olor</i> and close to that for <i>Cygnus cygnus</i> <i>Vanellus vanellus</i> and <i>Pluvialis apricaria</i>. The E.U. Birds Directive Annex I species <i>Circus cyaneus</i> regularly uses the site for hunting in autumn and winter.</p> <p>Perhaps even more important are its nesting <i>Crex crex</i> <i>Coturnix coturnix</i> and breeding waders. In 1987 1204 pairs of breeding waders were recorded (including adjacent parts of the Shannon) mainly <i>Vanellus vanellus</i> <i>Gallinago gallinago</i> <i>Numenius arquata</i> and <i>Tringa totanus</i>. <i>Crex crex</i> 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 <i>Coturnix coturnix</i> breeds. Numbers vary between years but up to 14 males have been heard. There are high populations of ground-nesting passerines such as <i>Alauda arvensis</i> <i>Anthus pratensis</i> <i>Locustella naevia</i> and <i>Emberiza schoeniclus</i> on the site. The River Shannon Callows is a breeding site for two Red Data Book waterbird species: <i>Limosa limosa islandica</i> and <i>Anas clypeata</i>. The Red Data Book species <i>Anas acuta</i> has also bred on the site though its current status is unknown. The E.U. Birds Directive Annex I species <i>Falco columbarius</i> 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.</p>	
000440	Lough Ree SAC	<p>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 <i>Pinus</i> species. A further area of wet woodland on cutover peat is notable for the abundance of <i>Frangula alnus</i>. Good to moderate examples of alkaline fens and calcareous dry grasslands also occur. Limestone pavement with species-rich woodland occurs at Rathcline.</p>	<p>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.</p>



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		Several Red Data plant species occur. <i>Lutra lutra</i> is frequent on the site and the fish <i>Coregonus autumnalis pollan</i> has been recorded. It is an important bird site for wintering and breeding waterfowl and has a colony of <i>Sterna hirundo</i> . It is of particular importance for the breeding population of <i>Melanitta nigra</i> as it is one of only three sites for the species in Ireland. Water quality of the lake is considered good.	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 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.	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. There is considerable precipitation of marl (CaCO ₃) 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.
000572	Clara Bog SAC	Clara Bog is a very good example of a large midland raised bog which contains examples of the Annex I habitats active raised bog degraded raised bog woodland depressions on peat substrates (Rhynchosporion) and orchid-rich calcareous grassland. One of the most unusual features of the bog is the presence of an infilling lake which supports mesotrophic fen vegetation. There is an associated soak area which is dominated by a well-developed wet birch woodland. This area of bog woodland is one of the best examples of the habitat in the country and supports a rich invertebrate flora which includes <i>Parhelophilus consimilis</i> and <i>Ampedus pomorum</i> . The moss <i>Tetraplodon angustatus</i> has its only Irish station on the bog while it is also the last known site for the vascular plant species <i>Scheuchzeria palustris</i> (transplanted to the site and now thought to be extinct). The site also provides habitat for important bird species such as <i>Lagopus lagopus</i> and breeding <i>Falco columbarius</i> . Clara Bog has been subject to detailed hydrological and ecological studies.	Most of the site is underlain by low permeability Waulsortian limestone. The southern section is underlain by relatively impermeable massive limestone. This bedrock is overlain by sands gravels and boulder clays which in turn are overlain by a layer of lacustrine clay. Shell marl is seen in a few places. The peat layer developed on top of this. An esker ridge runs roughly east-west along the northern edge of the site and a till mound is seen to the south. The raised bog developed in a former lake. Part of the old cutover bog has been converted to improved pasture which is included in the site for hydrological reasons. A conifer plantation will eventually be removed.



Site Code	Site Name	Quality of Site	Other Site Characteristics
000582	Raheenmore Bog SAC	Raheenmore Bog is a medium-sized midland raised bog site which contains good examples of the priority Annex I habitat active raised bog and the non-priority habitats degraded raised bog and depressions on peat substrates (Rhynchosporion). These habitats are generally of good quality. Most of the site is owned by the National Parks and Wildlife Service and there has been considerable research and restoration carried out on the site over the past 15 years. In addition to the presence of a well-developed flora the site provides habitat for important animal species such as <i>Rana temporaria</i> <i>Lacerta vivipara</i> <i>Lagopus lagopus</i> and is within a breeding territory of <i>Falco columbarius</i> .	This site is underlain by muddy limestone with low permeability. This is overlain by sands gravels and boulder clays. A layer of lacustrine clay lies over this on which the peat layer developed. The bog developed in a basin between low hills in which a lake would initially have been present. Part of the cutover bog has been converted to improved grassland which is included in the site for hydrological reasons.
000688	Lough Owel SAC	This lake comprises an excellent example of a hard water lake. Charophyte vegetation is well developed and includes some rare species of calcareous waters. The site holds a good population of <i>Austropotamobius pallipes</i> and good examples of transition mires and also some alkaline fen. A number of Red Data plant species and important invertebrate species occur at the site. The site is also an important bird site. Although affected by eutrophication in the late 1970s the lake has recovered and the quality of the water has apparently since been stable.	Lough Owel is a large calcareous lake in the Shannon Catchment. It is fed by small streams and springs and is mostly shallow though has a maximum depth 22m. The water is moderately hard alkaline and virtually colourless. The lake is relatively unproductive with low chlorophyll concentrations. Up to 60% of the lake bed is covered by charophyte-dominated vegetation. The shores of the lake are mostly exposed and stony. At the north-west and south-west ends of the lake complexes of wetland vegetation occur including areas of fen transition mires reedswamp wet woodland and wet grassland. The site is surrounded by fairly intensive farmland and some afforestation.
001831	Split Hills and Long Hill Esker SAC	This is one of the finest wooded esker ridges remaining in the country and constitutes one of the few woodlands in the area. In places a very rich ground flora is found in the woods. This includes several scarce species including the protected <i>Cardamine impatiens</i> which has not been recorded as a native elsewhere in Ireland. The site is very diverse and includes examples of many habitats. Species-rich calcareous grassland is found in many areas of the site. The protected plant <i>Galeopsis angustifolia</i> has been recorded from the site.	A linear site approximately 7km long which comprises for the most part an esker ridge composed of glacial sand and gravel. The main habitat is semi-natural deciduous woodland but this diverse site also contains significant areas of bog scrub improved and wet grasslands. Sand and gravel are extracted from three areas of the site. Roads and a river cross the site in several places.



Site Code	Site Name	Quality of Site	Other Site Characteristics
002120	Lough Bane and Lough Glass SAC	A small but diverse marl lake with well developed Chara communities including such species as Chara globularis C. contraria C. rudis and C. curta. Water quality is good with no apparent signs of pollution. The lake formerly had a good population of Austropotamobius pallipes but the entire population had become extinct by 1987 probably due to crayfish fungus plague. Habitat for crayfish remains suitable and there are plans for a reintroduction scheme.	The site is situated in a shallow valley on the headwaters of the River Deel. It comprises Lough Bane and two smaller lakes. Water level has dropped since the start of the 20th century exposing soft marl deposits. The lakes have well developed marginal swamp and fen vegetation. Parts of shoreline are wooded with mainly deciduous species. The site includes some areas of dry calcareous grassland. Surrounding areas are mostly semi-improved to improved pasture fields. Some afforestation has occurred in the area in recent times.
002121	Lough Lene SAC	A small to medium sized hard water marl lake in a fairly natural condition. A single sampling indicated a diverse Charophyte community including two marl lake indicators (Chara curta C. pendunculata). Water quality is generally good though likely to have received increased loading of nutrients from agricultural catchment in recent years. The site supported Austropotamobius pallipes prior to 1987 before eradication by crayfish fungus Aphanomyces astaci. A re-introduction programme has been successful and the species is now breeding again at the site. The site supports wintering waterfowl notably Aythya ferina which occur in nationally important numbers.	Situated in an area of Carboniferous limestone Lough Lene is a small to medium sized marl lake. Maximum length is 4.5 km and maximum depth is 20 m. Two small streams feed the lake and the main outflowing river is the River Deel which drains eastwards into the Boyne catchment. Lake is naturally oligotrophic though tends towards mesotrophic conditions at times. Shoreline mostly stony but areas of well developed marsh swamp and wet woodland vegetation occur in the sheltered areas at both the eastern and western ends. Situated in a fairly intensive agricultural catchment.
002201	Derragh Bog SAC	This Coillte owned site was never afforested and the main conservation problem for the bog was drying out due to drainage associated with peat cutting in the past and possibly the arterial drainage of the River Inny. The drainage also has facilitated the spread of birch and the invasive conifer Lodgepole Pine onto the bog. The main drains associated with the turf cutting were blocked in 2013/14 and the Lodgepole Pine (and birch where necessary) were controlled in 2014 as part of an E.U. funded Coillte LIFE project Demonstrating Best Practice in Raised Bog Restoration in Ireland. The objective of that project was to raise the water table and restore Active Raised Bog and Bog Woodland on the site. With the blocking of drains the cutover bog appears to be re-wetting water-levels in some areas now remain high throughout the year and limited areas of wet flats and hollows are	Derragh Bog SAC 002201 consists of 37.62 ha of raised bog (8.33 ha of high bog and 29.29 ha of cutover). It includes most of the raised bog system known as Derragh Bog which occurs within Lough Kinale and Derragh Lough NHA (000985). The western and southern boundary of the site is contiguous with the boundary of Lough Kinale and Derragh Lough SPA (site code 004061). This bog is an example of a floodplain raised bog which borders two lakes Lough Kinale to the west and Derragh Lough to the south the River Inny to the east and wet agricultural grassland to the north. There is a full transition from the high bog to cutover bog to semi-natural birch woodland fen swamp and lake. The underlying geology of both lakes and bog is carboniferous limestone. There is a small (0.19ha) example of immature Bog Woodland habitat that is part of a mosaic with non-typical raised bog vegetation on the eastern cutover of the SAC.



Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>developing. As a consequence raised bog vegetation is improving in quality and bog mosses (<i>Sphagnum</i> spp.) including the rare <i>Sphagnum pulchrum</i> are regenerating. However the majority of the recently cutover areas have not yet developed vegetation characteristic of the wet bog conditions. This situation is expected to improve over time as the bog surface becomes wetter. Derragh Bog SAC is a site of conservation significance comprising raised bog a rare habitat in the E.U. and one that is becoming increasingly scarce and under threat in Ireland. Although Derragh Bog is a small example of a raised bog its development in close association with the lakes and their floodplains and the relatively intact wetland transition between the two systems make it unusual in a western European context.</p> <p>In addition its location towards the north-eastern extreme of the range of raised bogs in Ireland and its close proximity to Moneybeg and Clare Island cSAC (002340) increases its ecological importance. The site is being actively managed for conservation as part of the Coillte E.U. LIFE Project. Ireland has a high proportion of the total E.U. resource of Atlantic raised bog (over 50%) and so has a special responsibility for its conservation at an international level.</p>	<p>It consist of a Downy birch (<i>Betula pubescens</i>) dominated wooded flush and invasive Lodgepole Pine (<i>Pinus contorta</i>) on old cutover with deep peat. An area of 0.64 ha of Degraded Raised Bog is expected to develop into Active Raised Bog in three locations on the old cutover in the long term. The area of the high bog has vegetation typical of a relative dry Midland raised bog. Much of the recent cutover area is drier with a low bog moss cover and there is some encroaching Downy Birch and Lodgepole Pine seedlings. In the older cutover there is an undulating surface with a complete vegetation cover and wet to very wet depressions. The cutover bog generally grades down to Birch (<i>Betula</i> spp.) woodland with Willow (<i>Salix</i> spp.) Common Gorse (<i>Ulex europaeus</i>) and Bracken (<i>Pteridium aquilinum</i>) along the bog margins which border the River Inny and the lake shores. Along the lake shores the bog grades into rich fen and swamp habitats with alder willow and wet grassland with Purple Moor-grass communities. These almost intact wetland transitions between raised bogs and lakes are extremely rare in Western Europe.</p>
002299	River Boyne and River Blackwater SAC	<p>The main channel of the Boyne contains a good example of alluvial woodland of the <i>Salicetum albo-fragilis</i> type which has developed on three alluvium islands. Alkaline fen vegetation is well represented at Lough Shesk where there is a very fine example of habitat succession from open water to raised bog. The Boyne and its tributaries is one of Ireland's premier game fisheries and offers a wide range of angling from fishing for spring salmon and grilse to sea trout fishing and extensive brown trout fishing. The site is one of the most important in eastern Ireland for <i>Salmo salar</i> and has very extensive spawning grounds. The site also has an important population of <i>Lampetra fluviatilis</i> though the distribution or abundance of this species is not well known. <i>Lutra lutra</i> is widespread throughout the site.</p>	<p>This site comprises most of the freshwater element of the River Boyne from upriver of the Boyne Aqueduct at Drogheda the Blackwater River as far as Lough Ramor and the principal Boyne tributaries notably the Deel Stoneyford and Tremblestown Rivers. This system drains a considerable area of Cos. Meath and Westmeath and smaller areas of Cavan and Louth. The underlying geology is Carboniferous Limestone for the most part with areas of Upper Lower and Middle well represented. In the vicinity of Kells Silurian Quartzite is present while close to Trim are Carboniferous Shales and Sandstones. The rivers flow through a landscape dominated by intensive agriculture mostly of improved grassland but also cereals. Much of the river channels were subject to arterial drainage schemes in the past.</p>



Site Code	Site Name	Quality of Site	Other Site Characteristics
		Some of the grassland areas along the Boyne and Blackwater are used by a nationally important winter flock of <i>Cygnus cygnus</i> . Several Red Data Book plants occur within the site with <i>Pyrola rotundifolia</i> , <i>Poa palustris</i> and <i>Juncus compressus</i> . Also occurring are a number of Red Data Book animals notably <i>Meles meles</i> , <i>Martes martes</i> and <i>Rana temporaria</i> . The River Boyne is a designated Salmonid Water under the EU Freshwater Fish Directive.	Natural flood-plains now exist along only limited stretches of river though often there is a fringe of reed swamp, freshwater marsh, wet grassland or deciduous wet woodland. Along some parts, notably between Drogheda and Slane, are stands of tall mature mixed woodland. Substantial areas of improved grassland and arable land are included in site for water quality reasons. There are many medium to large sized towns adjacent to but not within the site.
002313	Ballymore Fen SAC	The site supports a good example of transition mire vegetation that occurs in association with alkaline fen and incipient raised bog. It has many of the expected plant species for the habitat including the locally rare <i>Carex limosa</i> and an excellent diversity of bryophytes. The site supports the Red Data Book species <i>Pyrola rotundifolia</i> and has the legally protected amphibian species <i>Rana temporaria</i> and <i>Triturus vulgaris</i> as well as a diverse invertebrate fauna with at least five <i>Odontaspis</i> species. Quality of habitats is good and the site is in a fairly natural state.	Ballymore Fen occupies a relatively wide and deep depression in drift deposits that are underlain by Carboniferous Limestone. The site is fed on both the east and west by springs and there are small streams flowing from the north-east and south of the site. The area may at one stage have been a lake of some size but at present is occupied by a transition mire complex with the characteristic lagg fen at the edges. In the wetter areas towards the centre and south of the site the vegetation is characterised by a scraw. A mosaic of fen and incipient bog vegetation occurs elsewhere with transition mire vegetation present as part of this. Scrub dominated by <i>Salix</i> spp. is invading the drier areas. The site includes fields of semi-improved grassland which surround the wetland - much of this is species-rich calcareous grassland that is lightly grazed by cattle.
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 <i>Sphagnum</i> cover which includes an abundance of the rare species <i>S. pulchrum</i> and <i>S. fuscum</i> . 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 <i>Betula pubescens</i> is frequent in the south-western part of the cutover.



Site Code	Site Name	Quality of Site	Other Site Characteristics
004044	Lough Ennell SPA	<p>Lough Ennell is one of the most important midland lakes for wintering waterfowl with nationally important populations of <i>Cygnus olor</i>, <i>Aythya ferina</i>, <i>Aythya fuligula</i> and <i>Fulica atra</i>. The population of <i>Aythya fuligula</i> represents over 3% of the national total. It also attracts <i>Pluvialis apricaria</i> and <i>Vanellus vanellus</i> though these feed mainly outside of the site. At times the lake is utilised as a roost (with limited feeding) by the internationally important Midland lakes population of <i>Anser albifrons flavirostris</i>. It supports two Red Data Book charophyte species. The site is an important trout fishery.</p>	<p>Lough Ennell is a large limestone lake. It is approximately 6.5 km long and is mostly c. 2 km wide. The River Brosna is the principal inflowing and outflow river. It is a relatively shallow lake with a maximum depth of c. 30 m. The water is hard with low colour and markedly alkaline pH. The lake is classified as a mesotrophic system though it had been eutrophic in the past. The lake bottom is of limestone with a marl deposit. Lough Ennell supports a diverse aquatic flora with a particularly well-developed charophyte flora. Reedbeds and species-poor swamp vegetation occasionally fringe the lake particularly around the points of inflow and outflow and on the eastern shore. <i>Phragmites australis</i> is abundant in places. Much of the lakeshore is rather dry stony ground which was formerly part of the lake bed but is now exposed by drainage and colonised by calcareous grassland. Alkaline fen is also found on the lake shore. There are several islands within the lake.</p>
004047	Lough Owel SPA	<p>Lough Owel is one of the most important Midland lakes for wintering waterfowl with nationally important populations of <i>Anas clypeata</i> and <i>Fulica atra</i>. The populations of both of these species represent a significant proportion - 4.7% and 6.5% of the respective all-Ireland totals. It is also of importance for diving duck including <i>Aythya ferina</i> and <i>Bucephala clangula</i>. At times the lake is utilised by the internationally important Midland lakes flock of <i>Anser albifrons flavirostris</i>. The site is an important trout fishery.</p>	<p>Lough Owel is a medium- to large-sized lake measuring approximately 6 km along its long axis and with a maximum width of 3 km. It is fed by a number of small streams and the main outflow is to the Royal Canal. Water is relatively shallow with a maximum depth of 22 m. Overlying Carboniferous limestone Lough Owel is one of the most important examples of a limestone lake in the Midlands. The water is moderately hard alkaline and virtually colourless. The lake appears to be relatively unproductive with low levels of orthophosphate and moderate chlorophyll concentrations. The lake is classified as a mesotrophic and its status has been stable in recent years. Aquatic vegetation includes a number of stoneworts (<i>Chara</i> spp.). The rocky nature of the shoreline has given rise to marginal vegetation which is patchy and sparse. Apart from some reedswamp of <i>Phragmites australis</i> and <i>Scirpus lacustris</i> shoreline vegetation is dominated by occasional patches of <i>Alnus glutinosa</i>. Several small islands occur in the southern sector.</p>



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004102	Garriskil Bog SPA	Garriskil bog is a medium-sized raised bog site which contains good examples of the Annex 1 habitats active raised bog degraded raised bog and depressions on peat substrates (Rhynchosporion). A large proportion of the uncut high bog (c. 40%) comprises very wet active raised bog an unusually high figure for raised bogs in the eastern half of the country. The site is in the range of the midland lakes flock of wintering <i>Anser albifrons flavirostris</i> which is centred on four major lakes (Derravaragh Iron Owel and Ennel). There are 16 known feeding sites mostly on intensively managed grassland. In the past the site has been utilised by the geese but nowadays use of raised bogs is rare. <i>Falco columbarius</i> has been noted at Garriskil during the breeding season. <i>Gallinago gallinago Numenius arquata</i> and <i>Tringa totanus</i> also breed. <i>Tyto alba</i> has been recorded hunting along the margins of the bog and <i>Lagopus lagopus</i> is occasional.	Site lies 3 km west of Lough Derravaragh in Co. Westmeath. It is bounded to the southeast and southwest by the rivers Inny and Riffey. The bog is underlain by calcareous shales with a low permeability. A substantial area of uncut high bog remains though much of this is classified as degraded raised bog. Old cutaway bog surrounds the high bog and parts of this are dominated by <i>Betula pubescens</i> scrub.
004139	Lough Croan Turlough SPA	Lough Croan turlough is an important site for wintering waterfowl. It regularly supports a nationally important population of <i>Anser albifrons flavirostris</i> which is part of the internationally important River Suck population. It also has nationally important populations of <i>Anas clypeata</i> and <i>Pluvialis apricaria</i> . The <i>Anas clypeata</i> population represents a substantial (>5%) proportion of the all-Ireland total. Other species which occur regularly include <i>Cygnus cygnus</i> <i>Anas crecca</i> <i>Anas acuta</i> and <i>Vanellus vanellus</i> . The turlough also has breeding waterfowl species most notable <i>Anas clypeata</i> and <i>Aythya ferina</i> 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.
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 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.



Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>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 <i>Rhynchospora fusca</i> has been recorded from wet pools within the site. In the past the bog was used by wintering <i>Anser albifrons flavirostris</i> but the geese appear to have deserted the site in recent years. The site supports breeding <i>Numenius arquata</i> and <i>Gallinago gallinago</i>.</p>	
000685	Lough Ennell SAC	<p>This lake is one of the most important midland limestone lakes but the quality of the water has been poor owing to severe eutrophication in the 1970's. There has been improvement however and in 1990 it was classified as mesotrophic. A good diversity of charophytes have been recorded including some of the rare species of calcareous water. Some good alkaline fen fringes the lake in parts. <i>Lutra lutra</i> and <i>Lampetra planeri</i> occur at the site as well as some important invertebrate species. The site is an important bird area and has wintering <i>Anser albifrons flavirostris</i>. Further improvement in water quality would increase the value of this site.</p>	<p>Lough Ennell is a large open steep-sided limestone lake situated on the River Brosna within the Shannon catchment. The water is hard with low colour and markedly alkaline Ph. Maximum depth is 30m though the lake is generally much shallower. Much of the lakeshore is stony - wetland vegetation including reedswamp and alkaline fen fringe the lake in places particularly at the points of inflow and outflow of the Brosna and at the south west and south east shores. Mixed woodland much of it with a wet wood character occurs in places. Some improved grassland used by feeding <i>Anser albifrons flavirostris</i> is included in site. The lake is surrounded by generally good quality pasture land.</p>
002162	River Barrow and River Nore SAC	<p>The site supports many Annexed habitats including the priority habitats of alluvial woodland and petrifying springs. Quality of habitat is generally good. The site also supports a number of Annex II animal species - <i>Salmo salar</i> <i>Margaritifera margaritifera</i> <i>M.m. durrovensis</i> <i>Alosa fallax fallax</i> <i>Austropotamobius pallipes</i> <i>Petromyzon marinus</i> <i>Lutra lutra</i> <i>Lampetra fluviatilis</i> and <i>L. planeri</i>. Annex I Bird species include <i>Anser albifrons flavirostris</i> <i>Falco peregrinus</i> <i>Cygnus cygnus</i> <i>Cygnus columbianus bewickii</i> <i>Limosa lapponica</i> <i>Pluvialis apricaria</i> and <i>Alcedo atthis</i>. A range of rare plants and invertebrates are found in the woods along these rivers and rare plants are also associated with the saltmarsh.</p>	<p>This site consists of most of the freshwater stretches of the Barrow/Nore River catchments. The Barrow is tidal as far upriver as Graiguenamanagh while the Nore is tidal as far upriver as Inishtioge. The site also includes the extreme lower reaches of the River Suir and all of the estuarine component of Waterford Harbour extending to Creadan Head. The larger of the many tributaries include the Lerr Fushoge Mountain Aughavaud Owenass Boherbaun and Stradbally Rivers of the Barrow and the Delour Dinin Erkina Owveg Munster Arrigle and King's Rivers on the Nore. Both rivers rise in the Old Red Sandstone of the Slieve Bloom Mountains. They traverse limestone bedrock for a good proportion of their routes though the middle reaches of the Barrow and many of the eastern tributaries run through Leinster Granite. A wide range of habitats associated with the rivers are included within the site including substantial areas of woodland (deciduous mixed) dry heath wet grassland swamp and marsh vegetation salt marshes a small</p>



Site Code	Site Name	Quality of Site	Other Site Characteristics
			dune system biogenic reefs and intertidal sand and mud flats. Areas of improved grassland arable land and coniferous plantations are included in the site for water quality reasons.
002202	Mount Jessop Bog SAC	<p>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.</p>	<p>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 spreadgrounds. 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 <i>S. austinii</i> and <i>S. fuscum</i> (s.l.) occur. In places Sphagnum hummocks supports the Midland raised bog indicator species Bog Rosemary (<i>Andromeda polifolia</i>) and Cranberry (<i>Vaccinium oxycoccos</i>). There is also a record of the liverwort <i>Pleurozia purpurea</i> 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 (<i>Pinus contorta</i>) which is invading the open bog is being controlled as part of the restoration plan for the site. 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.</p>



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			<p>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). 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.</p>
002205	Wooddown Bog SAC	<p>The Degraded Raised Bog habitat in Wooddown Bog SAC is of conservation significance as it has the potential for restoration to Active Raised Bog which is a priority habitat in the EU and one that is scarce and under threat in Ireland. Despite the relatively small area of Degraded raised bog present the restoration actions have resulted in active redevelopment of the habitat towards Active Raised Bog which</p>	<p>Wooddown Bog SAC (002205) comprises 49.87 ha of raised bog (22.94 ha of high bog and over 26.93 ha cutover) which occupy the eastern end of Wooddown Bog NHA (Site Code 000694). Wooddown Bog is a Midland type raised bog developed in a basin. The SAC is bordered by open high bog on its northern and western margins by forestry on cutover bog on its eastern margin and by agricultural grassland on its southern side. All the SAC except</p>



Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>add to the diversity and scientific value of the site. 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. However some significant threats remain and an After LIFE management plan is being developed for the future conservation management of the SAC. The SAC is located within the raised bog Wooddown Bog NHA (000694) the conservation management of which should support the maintenance and improvement Degraded Raised Bog in the SAC.</p>	<p>for approximately 8.5 ha of high bog and cutover in the northwest was afforested in 1973-5 with conifer plantations. The remaining open high bog vegetation has a Midlands raised bog species composition but shows signs of significant drying out due to past drainage and turf cutting. When the conifers in the SAC were removed in 2011 all the intensive drainage system associated with it were blocked by 2013 as part of an EU funded LIFE project so as to raise the water table and restore Active Raised Bog (ARB) on the site. Prior to the felling there was relatively few bog species present on the afforested section. With the clear-felling of conifers and blocking of drains there are indications that the high bog is re-wetting. As a consequence raised bog vegetation has returned to the formerly afforested areas of the high bog. However the majority of the restored areas have not yet developed vegetation characteristic of the wettest conditions and there is a considerable amount of conifer and birch regeneration occurring in these areas. Several potential areas of Degraded Raised Bog (DRB) were identified by hydrological modelling. The most westerly of these is adjacent to a drain on the SAC boundary which cannot currently be closed and so it is not expected to recover until the drain is blocked. Another three areas of Degraded Raised Bog together comprise about 1.5 ha and occur in the central-southern section of the site. These now have standing surface water in the hollows and pools for most of the year with considerable areas of regenerating bog mosses.</p> <p>There is a wooded flush on the cutover in the northern section of the SAC. With further drain blocking on the high bog and cutover this may have the potential to develop into the priority habitat Bog Woodland (91D0) as elements of this habitat already occur in the NHA. Wet birch woodland is also developing on the middle section of the site. This habitat type may also evolve into Bog Woodland in the future at this location.</p>



Site Code	Site Name	Quality of Site	Other Site Characteristics
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.
002340	Moneybeg and Clareisland Bogs SAC	This site contains good examples of active raised bog degraded raised bog and Rhynchosporion vegetation. The areas of raised bog support a well-developed peatland flora and contain a number of wet pool areas. Of the two areas it appears that Moneybeg Bog contains higher quality raised bog habitat although the margins of Moneybeg have a more extensive surrounding cutover area. Along the northern edge of Clareisland Bog there is a well-preserved and relatively undisturbed transition from raised bog to lakeshore scrub which is a rare feature in Irish raised bogs. These raised bogs occur close to the north-easterly limits of raised bog distribution in the Republic of Ireland and this increases their conservation value.	Moneybeg and Clareisland Bogs are two small raised bogs separated by approximately 400 metres which are situated along the southern shores of Lough Sheelin. Most of the site area lies within Co. Westmeath with a small portion lying within Co. Meath. Clareisland Bog is long and narrow in outline while Moneybeg has a more ovoid shape. The areas of uncut high bog are classified mainly as degraded raised bog. The high bog is surrounded by cutover areas. There has been some planting of conifers in the cutover margins in recent decades. Land surrounding the site to the south is dominated by agricultural grassland. The main road which runs between the villages of Finnea and Ross traverses both areas of bog.



Site Code	Site Name	Quality of Site	Other Site Characteristics
002341	Ardagullion Bog SAC	Although Ardagullion Bog is rather small in terms of raised bog sites the bog retains a relatively large and wet central area which is classified as active bog. The structure of the active bog is good having a high cover of Sphagnum including the rather rare <i>S. imbricatum</i> a classic pool/hummock system and a wet flush. The remainder of the high bog is a typical example of degraded raised bog. A substantial area of Rhynchosporion vegetation is present most of which is associated with the wet central active area. A number of other relatively intact raised bogs lie to the south thus forming an interlinked complex of sites.	Ardagullion is a small raised bog located 6 km north-east of Edgeworthstown Co. Longford. The site comprises a substantial area of uncut high bog though much of this is classified as degraded. The site includes areas of conifer plantation and recently felled plantation - such areas have been included in order to protect the hydrological integrity of uncut high bog areas. Although there are a number of old drains on the high bog surface most of these have infilled with vegetation. Surrounding areas of cutover support areas of <i>Betula pubescens</i> scrub while parts have been converted to pasture grassland of varying quality.
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 <i>Anser flavirostris albifrons</i> . Appears to be seldom used nowadays which probably reflects a trend in recent years away from usage of raised bog sites. Supports breeding <i>Gallinago gallinago</i> and probably <i>Numenius arquata</i> . 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.
004043	Lough Derravaragh SPA	Lough Derravaragh is one of the most important midland lakes for wintering waterfowl. It supports nationally important populations of <i>Tachybaptus ruficollis</i> <i>Cygnus olor</i> <i>Aythya ferina</i> <i>Aythya fuligula</i> and <i>Fulica atra</i> . The <i>Aythya ferina</i> population is of particular note as it represents over 6% of the national total. At times the lake is utilised by the internationally important midland lakes population of <i>Anser albifrons flavirostris</i> . A regionally important population of <i>Cygnus cygnus</i> occurs along with a range of other species such as <i>Podiceps cristatus</i> <i>Anas penelope</i> and <i>Bucephala clangula</i> .	Lough Derravaragh is a medium- to large-sized lake of relatively shallow water (maximum depth 23 m). It extends along a SE-NW axis for approximately 8 km. The Inny River a tributary of the River Shannon is the main inflowing and outflowing river. It is a typical limestone lake with water of high hardness and alkaline pH. It is classified as a mesotrophic system. A notable feature is the range of charophytes that occur in the lake (8 species recorded). A range of marginal habitats have been created as a result of drainage of the River Inny. At the western end of the lake are extensive areas of swamp dominated by <i>Phragmites australis</i> . Elsewhere along the shore there is freshwater marsh vegetation dominated by <i>Carex</i> spp. Deciduous woodland fringes the lake at some areas.



Site Code	Site Name	Quality of Site	Other Site Characteristics
004046	Lough Iron SPA	Lough Iron is one of the most important Midland lakes for wintering waterfowl. It supports an internationally important population of <i>Anser albifrons flavirostris</i> and is the main feeding site for this flock which uses a suite of Midland lakes. It also has nationally important populations of <i>Cygnus cygnus</i> , <i>Anas penelope</i> , <i>Anas crecca</i> , <i>Anas clypeata</i> and <i>Pluvialis apricaria</i> and regionally important numbers of a range of other species including <i>Anas acuta</i> , <i>Aythya ferina</i> , <i>Aythya fuligula</i> and <i>Fulica atra</i> . The site is of particular value as it provides both feeding and roost sites for the various species.	Lough Iron is a small- to moderately-sized Midland lake. It is situated on the Inny River which flows from Lough Derravaragh approximately 5 km to the north-east. Lough Owel occurs a few kilometres to the south-east and is hydrologically connected to Lough Iron by a stream. The underlying geology is limestone and the lake is mesotrophic in character. Drainage of the River Inny in the 1960s has led to a dramatic drop in the level of the lake and this in turn has led to the development of freshwater marsh and wet grassland on what was previously lake bed. The dominant wetland plant species along the margins of the lake are <i>Phragmites australis</i> and <i>Phalaris arundinacea</i> . <i>Molinia caerulea</i> forms large expanses of wet grassland above the lake shore. There are also patches of calcareous fen and some wet woodland dominated by <i>Betula pubescens</i> . The lake is surrounded by agricultural land much of which is managed intensively - the grassland fields which are used by geese and swans for feeding purposes are included in the site. These are also used by duck species such as <i>Anas penelope</i> and waders. Some conifer plantations along the western shore of the lake are included in the site to provide screening for feeding birds.
004061	Lough Kinale and Derragh Lough SPA	Despite very variable water quality in recent decades Lough Kinale and Derragh Lough remain an important site for wintering waterfowl especially diving duck. The site supports nationally important populations of two species: <i>Aythya ferina</i> and <i>Aythya fuligula</i> . A large population of <i>Cygnus olor</i> occurs. <i>Fulica atra</i> whilst still occurring in substantial numbers formerly had a population of national importance. A range of other species are found in relatively low numbers including <i>Podiceps cristatus</i> and <i>Anas platyrhynchos</i> . Birds commute between this site and the nearby and much larger Lough Sheelin.	Lough Kinale is a relatively small lake that is situated immediately downstream of Lough Sheelin and is at the top of the catchment of the Inny River a main tributary of the River Shannon. Derragh Lough a much smaller system is connected to Lough Kinale and the Inny River outlet. This is a typical limestone system and is very shallow (maximum depth of Kinale is c. 4 m). The trophic status of the lake has varied greatly since the 1970s due to pollution from mainly agricultural sources. It was recently (1998-2000) classified as a highly eutrophic system. Lough Kinale has two main basins almost separated by swamp formations. Reed swamp is frequent around the lakes with a calcium-rich small sedge marsh present along parts of the shore. The lake was formerly an important trout fishery. Areas of bog occur around the margins of the lakes in places but some of these have been planted with conifers.



Site Code	Site Name	Quality of Site	Other Site Characteristics
004080	Boyne Estuary SPA	The Boyne Estuary is one of the most important sites for wintering waterfowl on the east coast. It has a total of 10 species with populations of national importance - of particular note is that it supports 7.0% of the national total of <i>Calidris canutus</i> and 4.0% of the total for <i>Pluvialis apricaria</i> . Other species which have populations of national importance include <i>Tadorna tadorna</i> <i>Haematopus ostralegus</i> <i>Vanellus vanellus</i> <i>Limosa limosa</i> <i>Tringa totanus</i> and <i>Arenaria interpres</i> . The site provides both feeding and roosting areas for the birds. <i>Sterna albifrons</i> bred in the past but successful breeding has not occurred since 1996.	This moderately-sized coastal site which is situated below the town of Drogheda comprises most of the estuary of the Boyne River a substantial river which drains a large catchment. Apart from one section which is over 1 km wide the width is mostly less than 500 m. The main river channel which is navigable and dredged is defined by training walls the latter being breached in places. Intertidal flats occur on the sides of the channelled river. The sediments vary from fine muds in the innermost areas to sandy muds or sands towards the mouth. The linear stretches of intertidal flats to the north and south of the river mouth are mainly sands. Intertidal areas are fringed by salt marshes in the inner sheltered areas. <i>Spartina</i> is frequent on the flats and salt marshes.
004097	River Suck Callows SPA	The River Suck Callows is an important site for wintering waterfowl with an internationally important population of <i>Anser albifrons flavirostris</i> centred within the site. This is one of the largest flocks in the country outside of the Wexford Slob. Despite poor survey data for recent years it is known that at least three species have populations of national importance: <i>Cygnus cygnus</i> <i>Anas penelope</i> and <i>Vanellus vanellus</i> . <i>Cygnus columbarius bewickii</i> formerly occurred in significant numbers but has abandoned the site in line with a marked contraction of range at a national level. <i>Crex crex</i> formerly bred but not since the early 1990s. This site provides one of the few remaining examples in the country of a large river system of which parts still flood in a fairly natural way.	The River Suck is the largest tributary of the River Shannon. The site follows the river from Castlecoote near Fuerty to its confluence with the River Shannon a distance of approximately 70 km of river course. The main habitat is grassland improved to varying extents that is seasonally flooded. The less improved areas are species-rich. The grassland is used mainly for pasture but some is used for silage or occasionally hay-making. The river channel is fringed in places by swamp and marsh vegetation. The site adjoins several raised bogs and cutover bogs and there are turloughs in the vicinity.
004232	River Boyne and River Blackwater SPA	The River Boyne and River Blackwater SPA supports nationally important numbers of <i>Alcedo atthis</i> . Other species which occur within the site include <i>Cygnus olor</i> <i>Anas crecca</i> <i>Anas platyrhynchos</i> <i>Phalacrocorax carbo</i> <i>Ardea cinerea</i> <i>Gallinula chloropus</i> <i>Gallinago gallinago</i> and <i>Riparia riparia</i> .	The River Boyne and River Blackwater SPA is a long linear site that comprises stretches of the River Boyne and several of its tributaries: most of the site is in Co Meath but it extends also into Counties Cavan Louth and Westmeath. It includes the following river sections: The River Boyne from the M1 motorway bridge west of Drogheda to the junction with the Royal Canal west of Longwood Co Meath; the River Blackwater from its junction with the River Boyne in Navan to the junction with Lough Ramor in Co Cavan;



Site Code	Site Name	Quality of Site	Other Site Characteristics
			the Tremblestown River (and Athboy River) from the junction with the River Boyne at Kilnagross Bridge to the bridge in Athboy Co Meath; the Stoneyford River from its junction with the River Boyne to Stonestone Bridge in Co. Westmeath; the River Deel from its junction with the River Boyne to Cummer Bridge Co. Westmeath. The site includes the river channel and marginal vegetation.

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
000006	Killyconny Bog (Cloghbally) SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	G05.04, J01, J02, J02.01, G01.03.02, B01, D01.01, A04.01.01, C01, A08, G05.09, F06.01, H05.01, G01	Vandalism, Fire and fire suppression, Human induced changes in hydraulic conditions, Landfill, land reclamation and drying out, general, Off-road motorized driving, Forest planting on open ground, Paths, tracks, cycling tracks, Intensive cattle grazing, Mining and quarrying, Fertilisation, Fences, fencing, Game or bird breeding station, Garbage and solid waste, Outdoor sports and leisure activities, recreational activities
000216	River Shannon Callows SAC	Otter (<i>Lutra lutra</i>) [1355], Alkaline fens [7230], Limestone pavements [8240], Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) [6510], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0], <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]	K03.04, J02.11, A04.02.05, J02.05, A07, J02.05.02, A03.03, F03.01, A03, C01.03.02, A08, A04.03, A04.01, G05.01, B02.02, D01.01, G01, B06, J02.04.01, A10.01, J02.01	Predation, Siltation rate changes, dumping, depositing of dredged deposits, Non intensive mixed animal grazing, Modification of hydrographic functioning, general, Use of biocides, hormones and chemicals, Modifying structures of inland water courses, Abandonment or lack of mowing, Hunting, Mowing or cutting of grassland, Mechanical removal of peat, Fertilisation, Abandonment of pastoral systems lack of grazing, Intensive grazing, Trampling, overuse, Forestry clearance, Paths, tracks, cycling tracks, Outdoor sports and leisure activities, recreational activities, Grazing in forests or woodland, Flooding, Removal of hedges and copses or scrub, Landfill, land reclamation and drying out, general



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000440	Lough Ree SAC	Bog woodland [91D0], Active raised bogs [7110], Alkaline fens [7230], Otter (<i>Lutra lutra</i>) [1355], Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0], Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210], Limestone pavements [8240], Degraded raised bogs still capable of natural regeneration [7120]	A03.03, D03.01.02, K03.05, F03.01, A08, I01, H06.03, J02.11.02, H01.08, F02.03, B02, G02.09, G01.01, A04, E01.03, J02.04, G01.02, L08, H02.06	Abandonment or lack of mowing, Piers or tourist harbours or recreational piers, Antagonism arising from introduction of species, Hunting, Fertilisation, Invasive non-native species, Thermal heating of water bodies, Other siltation rate changes, Diffuse pollution to surface waters due to household sewage and waste waters, Leisure fishing, Forest and Plantation management & use, Wildlife watching, Nautical sports, Grazing, Dispersed habitation, Flooding modifications, Walking, horseriding and non-motorised vehicles, Inundation (natural processes), Diffuse groundwater pollution due to agricultural and forestry activities
000448	Fortwilliam Turlough SAC	Turloughs [3180]	J02.07.01, J02.07.02, G02.09, H02.06, A04.01.01	Groundwater abstractions for agriculture, Groundwater abstractions for public water supply, Wildlife watching, Diffuse groundwater pollution due to agricultural and forestry activities, Intensive cattle grazing
000571	Charleville Wood SAC	Desmoulin's whorl snail (<i>Vertigo moulinsiana</i>) [1016], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	G01, F05.04, F03.02.04, G02.09, B02, F03.02.03, F04, G01.02	Outdoor sports and leisure activities, recreational activities, Poaching, Predator control, Wildlife watching, Forest and Plantation management & use, Trapping, poisoning, poaching, Taking or Removal of terrestrial plants, general, Walking, horseriding and non-motorised vehicles
000572	Clara Bog SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210], Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0], Depressions on peat substrates of the <i>Rhynchosporion</i> [7150], Active raised bogs [7110]	A04.03, C01.01.01, E04.01, D01.01, J02.15, A08, A05.02, X, F04, J02.10, E03.01, C01.03, J01.01	Abandonment of pastoral systems lack of grazing, Sand and gravel quarries, Agricultural structures, buildings in the landscape, Paths, tracks, cycling tracks, Other human induced changes in hydraulic conditions, Fertilisation, Stock feeding, No threats or pressures, Taking or Removal of terrestrial plants, general, Management of aquatic and bank vegetation for drainage purposes, Disposal of household or recreational facility waste, Peat extraction, Burning down



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000575	Ferbane Bog SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	B03, C01.03, J01.01, A08, C01.01, E03.03, E03.01, A02.01, A10, J02.15, X, K02.01	Forest exploitation without replanting or natural regrowth, Peat extraction, Burning down, Fertilisation, Sand and gravel extraction, Disposal of inert materials, Disposal of household or recreational facility waste, Agricultural intensification, Restructuring agricultural land holding, Other human induced changes in hydraulic conditions, No threats or pressures, Species composition change (succession)
000576	Fin Lough (Offaly) SAC	Alkaline fens [7230], Geyer's whorl snail (Vertigo geyeri) [1013]	K02, K01.02, J01.01, A04.03, E03.01, K01.03, E03.03, F03.01, J02.10, X	Biocenotic evolution, succession, Silting up, Burning down, Abandonment of pastoral systems lack of grazing, Disposal of household or recreational facility waste, Drying out, Disposal of inert materials, Hunting, Management of aquatic and bank vegetation for drainage purposes, No threats or pressures
000580	Mongan Bog SAC	Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	E03.01, E03.03, A08, A05.02, J02.15, F03.01, X, C01.03, J01.01	Disposal of household or recreational facility waste, Disposal of inert materials, Fertilisation, Stock feeding, Other human induced changes in hydraulic conditions, Hunting, No threats or pressures, Peat extraction, Burning down
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]	E03.03, J01.01, E03.01, J02.15, F03.01, A07, X, C01.03, A04.01.04	Disposal of inert materials, Burning down, Disposal of household or recreational facility waste, Other human induced changes in hydraulic conditions, Hunting, Use of biocides, hormones and chemicals, No threats or pressures, Peat extraction, Intensive goat grazing
000582	Raheenmore Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	X, A02.01, J02.01.03	No threats or pressures, Agricultural intensification, Infilling of ditches, dykes, ponds, pools, marshes or pits
000610	Lough Croan Turlough SAC	Turloughs [3180]	A04, F03.02.04, A05.02	Grazing, Predator control, Stock feeding
000611	Lough Funshinagh SAC	Rivers with muddy banks with Chenopodium rubri p.p. and Bidention p.p. vegetation [3270], Turloughs [3180]	A08, A05.02, D01.01, F03.02.04	Fertilisation, Stock feeding, Paths, tracks, cycling tracks, Predator control



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000679	Garriskil Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Depressions on peat substrates of the Rhynchosporion [7150], Active raised bogs [7110]	I02, I01, J01.01, A04.02.01, J02.15, C01.03.02	Problematic native species, Invasive non-native species, Burning down, Non intensive cattle grazing, Other human induced changes in hydraulic conditions, Mechanical removal of peat
000685	Lough Ennell SAC	Alkaline fens [7230]	F02.03.02, H01.05, A04.02.05, J02.05.02, F03.01, H06.01.01, A04.03, B02.02, J02.01, H06.02, H01.08, K03.01, A04.01.01, D01.01	Pole fishing, Diffuse pollution to surface waters due to agricultural and forestry activities, Non intensive mixed animal grazing, Modifying structures of inland water courses, Hunting, Point source or irregular noise pollution, Abandonment of pastoral systems lack of grazing, Forestry clearance, Landfill, land reclamation and drying out, general, Light pollution, Diffuse pollution to surface waters due to household sewage and waste waters, Competition (fauna), Intensive cattle grazing, Paths, tracks, cycling tracks
000688	Lough Owel SAC	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], Alkaline fens [7230], Transition mires and quaking bogs [7140], White-clawed crayfish (Austroptamobius pallipes) [1092]	F03.01, D03.01.02, D04, J02.06.02, G02.10, X, G01, H01.05, J02.01	Hunting, Piers or tourist harbours or recreational piers, Airports, flightpaths, Surface water abstractions for public water supply, Other sport or leisure complexes, No threats or pressures, Outdoor sports and leisure activities, recreational activities, Diffuse pollution to surface waters due to agricultural and forestry activities, Landfill, land reclamation and drying out, general
000692	Scragh Bog SAC	Slender green feather-moss (Hamatocaulis vernicosus) [6216], Alkaline fens [7230], Transition mires and quaking bogs [7140]	H01.08, I01, D01.01, A08, A11	Diffuse pollution to surface waters due to household sewage and waste waters, Invasive non-native species, Paths, tracks, cycling tracks, Fertilisation, Agriculture activities not referred to above
001625	Castlesamps on Esker SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210], Turloughs [3180]	A04, C01.01, A10.01, C01.03.01	Grazing, Sand and gravel extraction, Removal of hedges and copses or scrub, Hand cutting of peat
001776	Pilgrim's Road Esker SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	K02.01, A07, A08, A05.02, D01, E03.03, A04.01, A10.01, A02.01, A04.03	Species composition change (succession), Use of biocides, hormones and chemicals, Fertilisation, Stock feeding, Roads, paths and railroads, Disposal of inert materials, Intensive grazing, Removal of hedges and copses or scrub, Agricultural intensification, Abandonment of pastoral systems lack of grazing



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
001810	White Lough, Ben Loughs and Lough Doo SAC	White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]	J02.01, A04.03, A11, E03.03, A08, G01, F03.02.03	Landfill, land reclamation and drying out, general, Abandonment of pastoral systems lack of grazing, Agriculture activities not referred to above, Disposal of inert materials, Fertilisation, Outdoor sports and leisure activities, recreational activities, Trapping, poisoning, poaching
001831	Split Hills and Long Hill Esker SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210]	K04.01, D01.01, K02.01, A04.02.05, A04.01.01, A04.02.01	Competition (flora), Paths, tracks, cycling tracks, Species composition change (succession), Non intensive mixed animal grazing, Intensive cattle grazing, Non intensive cattle grazing
001957	Boyne Coast and Estuary SAC	Embryonic shifting dunes [2110], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Estuaries [1130], Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Mudflats and sandflats not covered by seawater at low tide [1140]	G01.03.02, G05, G03, I01, E03.03, J02, J03.03, K02, E01, D01.01, D01.05, J02.01.03, J02.02, L07, J02.12, G05.04, G01.02, H01, E03.01, E05, J02.12.01	Off-road motorized driving, Other human intrusions and disturbances, Interpretative centres, Invasive non-native species, Disposal of inert materials, Human induced changes in hydraulic conditions, Reduction, lack or prevention of erosion, Biocenotic evolution, succession, Urbanised areas, human habitation, Paths, tracks, cycling tracks, Bridge, viaduct, Infilling of ditches, dykes, ponds, pools, marshes or pits, Removal of sediments (mud...), Storm, cyclone, Dykes, embankments, artificial beaches, general, Vandalism, Walking, horseriding and non-motorised vehicles, Pollution to surface waters (limnic & terrestrial, marine & brackish), Disposal of household or recreational facility waste, Storage of materials, Sea defense or coast protection works, tidal barrages
002120	Lough Bane and Lough Glass SAC	White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]	A10.01, J02.06.02	Removal of hedges and copses or scrub, Surface water abstractions for public water supply
002121	Lough Lene SAC	White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]	A04.03, D03.01.02, X, A08, A11, H01.08	Abandonment of pastoral systems lack of grazing, Piers or tourist harbours or recreational piers, No threats or pressures, Fertilisation, Agriculture activities not referred to above, Diffuse pollution to surface waters due to household sewage and waste waters



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002162	River Barrow and River Nore SAC	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1029], Atlantic salmon (<i>Salmo salar</i>) [1106], Otter (<i>Lutra lutra</i>) [1355], Mudflats and sandflats not covered by seawater at low tide [1140], Reefs [1170], Sea lamprey (<i>Petromyzon marinus</i>) [1095], Killarney fern (<i>Trichomanes speciosum</i>) [1421], Brook lamprey (<i>Lampetra planeri</i>) [1096], River lamprey (<i>Lampetra fluviatilis</i>) [1099], White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Nore Pearl Mussel (<i>Margaritifera durrovensis</i>) [1990], Twaite shad (<i>Alosa fallax</i>) [1103], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], Desmoulin's whorl snail (<i>Vertigo moulinsiana</i>) [1016], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Estuaries [1130], European dry heaths [4030], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, <i>Salicion albae</i>) [91E0]	J02, C01.03, F02.03, J02.02.01, F02.01.02, I01, F02, A10.01, B02.01.01, A04.01.01, H01, J02.06, D03.01, C01.01.01, K01.01, J02.05.02, A02.01, F01.01, B02, J02.12.02, M01, E02, J03.02.01, B05, B07	Human induced changes in hydraulic conditions, Peat extraction, Leisure fishing, Dredging or removal of limnic sediments, Netting, Invasive non-native species, Fishing and harvesting aquatic resources, Removal of hedges and copses or scrub, Forest replanting (native trees), Intensive cattle grazing, Pollution to surface waters (limnic & terrestrial, marine & brackish), Water abstractions from surface waters, Port areas, Sand and gravel quarries, Erosion, Modifying structures of inland water courses, Agricultural intensification, Intensive fish farming, intensification, Forest and Plantation management & use, Dykes and flooding defense in inland water systems, Changes in abiotic conditions, Industrial or commercial areas, Reduction in migration or migration barriers, Use of fertilizers (forestry), Forestry activities not referred to above



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002165	Lower River Shannon SAC	Perennial vegetation of stony banks [1220], Estuaries [1130], Bottlenose dolphin (<i>Tursiops truncatus</i>) [1349], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Large shallow inlets and bays [1160], Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachion</i> vegetation [3260], Atlantic salmon (<i>Salmo salar</i>) [1106], Mudflats and sandflats not covered by seawater at low tide [1140], Reefs [1170], Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330], Coastal lagoons [1150], Brook lamprey (<i>Lampetra planeri</i>) [1096], Sea lamprey (<i>Petromyzon marinus</i>) [1095], <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>) [6410], Mediterranean salt meadows (<i>Juncetalia maritima</i>) [1410], Sandbanks which are slightly covered by sea water all the time [1110], Otter (<i>Lutra lutra</i>) [1355], Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1029], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Vegetated sea cliffs of the Atlantic and Baltic coasts [1230], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alno incanae</i> , <i>Salicion albae</i>) [91E0]	A08, A04, F02.03, C01.01.02, J02.10, E03, H04, E01, C01.03.01, J02.01.01, I01, F01, D01.01, K02.03, G01.01, J02.01.02, B, J02.12.01, F03.01	Fertilisation, Grazing, Leisure fishing, Removal of beach materials, Management of aquatic and bank vegetation for drainage purposes, Discharges, Air pollution, air-borne pollutants, Urbanised areas, human habitation, Hand cutting of peat, Polderisation, Invasive non-native species, Marine and Freshwater Aquaculture, Paths, tracks, cycling tracks, Eutrophication (natural), Nautical sports, Reclamation of land from sea, estuary or marsh, Sylviculture, forestry, Sea defense or coast protection works, tidal barrages, Hunting
002201	Derragh Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Bog woodland [91D0]	I02, J02.15, J01.01, I01, B02.02	Problematic native species, Other human induced changes in hydraulic conditions, Burning down, Invasive non-native species, Forestry clearance
002202	Mount Jessop Bog SAC	Bog woodland [91D0], Degraded raised bogs still capable of natural regeneration [7120]	I01, J02.15, I02, J01.01, B02.02	Invasive non-native species, Other human induced changes in hydraulic conditions, Problematic native species, Burning down, Forestry clearance



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002203	Girley (Drewstown) Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	J02.15, I02, I01, J01.01, J02.01, B02.02	Other human induced changes in hydraulic conditions, Problematic native species, Invasive non-native species, Burning down, Landfill, land reclamation and drying out, general, Forestry clearance
002205	Wooddown Bog SAC	Degraded raised bogs still capable of natural regeneration [7120]	J02.01, J01.01, C01.03.01, J02.15, I01, I02, B02.02	Landfill, land reclamation and drying out, general, Burning down, Hand cutting of peat, Other human induced changes in hydraulic conditions, Invasive non-native species, Problematic native species, Forestry clearance
002214	Killeglan Grassland SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04, A04.01.02, J02.01	Grazing, Intensive sheep grazing, Landfill, land reclamation and drying out, general
002241	Lough Derg, North-East Shore SAC	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0], Alkaline fens [7230], <i>Taxus baccata</i> woods of the British Isles [91J0], <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130], Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210], Limestone pavements [8240]	J02, I01, G02.09, A04.02.05, D03.01.02, H01, C01, K02.03, H01.08, J02.10, A10.01, D01.01, G01, J02.01.03, A08, B02.01.01, M01.01, K02.01, M01.03, M01.02, A04.01, I02	Human induced changes in hydraulic conditions, Invasive non-native species, Wildlife watching, Non intensive mixed animal grazing, Piers or tourist harbours or recreational piers, Pollution to surface waters (limnic & terrestrial, marine & brackish), Mining and quarrying, Eutrophication (natural), Diffuse pollution to surface waters due to household sewage and waste waters, Management of aquatic and bank vegetation for drainage purposes, Removal of hedges and copses or scrub, Paths, tracks, cycling tracks, Outdoor sports and leisure activities, recreational activities, Infilling of ditches, dykes, ponds, pools, marshes or pits, Fertilisation, Forest replanting (native trees), Temperature changes (e.g. rise of temperature & extremes), Species composition change (succession), Flooding and rising precipitations, Droughts and less precipitations, Intensive grazing, Problematic native species
002299	River Boyne and River Blackwater SAC	Alkaline fens [7230], Otter (<i>Lutra lutra</i>) [1355], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0], Atlantic salmon (<i>Salmo salar</i>) [1106], River lamprey (<i>Lampetra fluviatilis</i>) [1099]	A01, E01.04, E02, D01.05, G01, C01.01, G05, G05.06, D01.02, A03, A08, J02.05.02, H01, G02.10, A10.01, B01.02, A05.02,	Cultivation, Other patterns of habitation, Industrial or commercial areas, Bridge, viaduct, Outdoor sports and leisure activities, recreational activities, Sand and gravel extraction, Other human intrusions and disturbances, Tree surgery, felling for public safety, removal of roadside trees, Roads, motorways, Mowing or cutting of grassland, Fertilisation, Modifying structures of inland water courses,



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
			E03.02, J02.10, E05, J02.15, J02, J02.11, I01, A07, E03.04	Pollution to surface waters (limnic & terrestrial, marine & brackish), Other sport or leisure complexes, Removal of hedges and copses or scrub, Artificial planting on open ground (non-native trees), Stock feeding, Disposal of industrial waste, Management of aquatic and bank vegetation for drainage purposes, Storage of materials, Other human induced changes in hydraulic conditions, Human induced changes in hydraulic conditions, Siltation rate changes, dumping, depositing of dredged deposits, Invasive non-native species, Use of biocides, hormones and chemicals, Other discharges
002313	Ballymore Fen SAC	Transition mires and quaking bogs [7140]	A03.02, A08, A04.03, A04.02.05, I02, H01.03	Non intensive mowing, Fertilisation, Abandonment of pastoral systems lack of grazing, Non intensive mixed animal grazing, Problematic native species, Other point source pollution to surface water
002336	Carn Park Bog SAC	Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110]	C01.03.02, I01, B02.02, J02.01, D01.01, I03, J02.05	Mechanical removal of peat, Invasive non-native species, Forestry clearance, Landfill, land reclamation and drying out, general, Paths, tracks, cycling tracks, Introduced genetic material, GMO, Modification of hydrographic functioning, general
002337	Crosswood Bog SAC	Active raised bogs [7110], Degraded raised bogs still capable of natural regeneration [7120]	A05.02, C01.03.02, E03.01, D01.01, J02.01, I03, I01, J02.05, B02.02, J01	Stock feeding, Mechanical removal of peat, Disposal of household or recreational facility waste, Paths, tracks, cycling tracks, Landfill, land reclamation and drying out, general, Introduced genetic material, GMO, Invasive non-native species, Modification of hydrographic functioning, general, Forestry clearance, Fire and fire suppression
002339	Ballynamona Bog and Corkip Lough SAC	Bog woodland [91D0], Turloughs [3180], Degraded raised bogs still capable of natural regeneration [7120], Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150]	J02.01, E03.01, I01, A10.01, A04, J02.05	Landfill, land reclamation and drying out, general, Disposal of household or recreational facility waste, Invasive non-native species, Removal of hedges and copses or scrub, Grazing, Modification of hydrographic functioning, general



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
002340	Moneybeg and Clareisland Bogs SAC	Active raised bogs [7110], Depressions on peat substrates of the Rhynchosporion [7150], Degraded raised bogs still capable of natural regeneration [7120]	B02.02, E03.01, C01.03.02, G02.10, F03.01, J02.15, I01, J01.01	Forestry clearance, Disposal of household or recreational facility waste, Mechanical removal of peat, Other sport or leisure complexes, Hunting, Other human induced changes in hydraulic conditions, Invasive non-native species, Burning down
002341	Ardagullion 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, X	Other human induced changes in hydraulic conditions, No threats or pressures
002342	Mount Hevey 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, J02.01, J02.03, I01, K04.02, C01.03.02, D01.01, I03, D01.04, J02.05, B02.02	Disposal of household or recreational facility waste, Landfill, land reclamation and drying out, general, Canalisation & water deviation, Invasive non-native species, Parasitism (flora), Mechanical removal of peat, Paths, tracks, cycling tracks, Introduced genetic material, GMO, Railway lines, TGV, Modification of hydrographic functioning, general, Forestry clearance
004017	Mongan Bog SPA	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	C01.03, C01.01, A04, D05	Peat extraction, Sand and gravel extraction, Grazing, Improved access to site
004043	Lough Derravaragh SPA	Pochard (<i>Aythya ferina</i>) [A059], Tufted Duck (<i>Aythya fuligula</i>) [A061], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Coot (<i>Fulica atra</i>) [A125], Wetland and Waterbirds [A999]	A05.01, A08, F02.03, B, F03.01	Animal breeding, Fertilisation, Leisure fishing, Sylviculture, forestry, Hunting
004044	Lough Ennell SPA	Tufted Duck (<i>Aythya fuligula</i>) [A061], Coot (<i>Fulica atra</i>) [A125], Pochard (<i>Aythya ferina</i>) [A059], Wetland and Waterbirds [A999]	G01.01, G01.02, F02.03, E01, F03.01, G05.01, B, A08	Nautical sports, Walking, horseriding and non-motorised vehicles, Leisure fishing, Urbanised areas, human habitation, Hunting, Trampling, overuse, Sylviculture, forestry, Fertilisation
004045	Glen Lough SPA	Whooper Swan (<i>Cygnus cygnus</i>) [A038]	B01, X, A08	Forest planting on open ground, No threats or pressures, Fertilisation



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004046	Lough Iron SPA	Shoveler (<i>Anas clypeata</i>) [A056], Wigeon (<i>Anas penelope</i>) [A050], Wetland and Waterbirds [A999], Teal (<i>Anas crecca</i>) [A052], Coot (<i>Fulica atra</i>) [A125], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395], Whooper Swan (<i>Cygnus cygnus</i>) [A038]	B, A04, A08	Sylviculture, forestry, Grazing, Fertilisation
004047	Lough Owel SPA	Coot (<i>Fulica atra</i>) [A125], Shoveler (<i>Anas clypeata</i>) [A056], Wetland and Waterbirds [A999]	J02, B, F02.03, A08, F03.01	Human induced changes in hydraulic conditions, Sylviculture, forestry, Leisure fishing, Fertilisation, Hunting
004058	Lough Derg (Shannon) SPA	Cormorant (<i>Phalacrocorax carbo</i>) [A017], Tufted Duck (<i>Aythya fuligula</i>) [A061], Common tern (<i>Sterna hirundo</i>) [A193], Goldeneye (<i>Bucephala clangula</i>) [A067], Wetland and Waterbirds [A999]	F02.03, G01.01, F03.01, A08	Leisure fishing, Nautical sports, Hunting, Fertilisation
004061	Lough Kinale and Derragh Lough SPA	Tufted Duck (<i>Aythya fuligula</i>) [A061], Wetland and Waterbirds [A999], Pochard (<i>Aythya ferina</i>) [A059]	A05.01, F03.01, B, A08, X, F02.03	Animal breeding, Hunting, Sylviculture, forestry, Fertilisation, No threats or pressures, Leisure fishing
004064	Lough Ree SPA	Common Scoter (<i>Melanitta nigra</i>) [A065], Goldeneye (<i>Bucephala clangula</i>) [A067], Coot (<i>Fulica atra</i>) [A125], Shoveler (<i>Anas clypeata</i>) [A056], Teal (<i>Anas crecca</i>) [A052], Wigeon (<i>Anas penelope</i>) [A050], Tufted Duck (<i>Aythya fuligula</i>) [A061], Common tern (<i>Sterna hirundo</i>) [A193], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wetland and Waterbirds [A999], Little Grebe (<i>Tachybaptus ruficollis</i>) [A004], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Mallard (<i>Anas platyrhynchos</i>) [A053], Lapwing (<i>Vanellus vanellus</i>) [A142]	A04, F02.03, A08, G01.02, B, F03.01, G01.01, I01	Grazing, Leisure fishing, Fertilisation, Walking, horseriding and non-motorised vehicles, Sylviculture, forestry, Hunting, Nautical sports, Invasive non-native species



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004065	Lough Sheelin SPA	Goldeneye (<i>Bucephala clangula</i>) [A067], Wetland and Waterbirds [A999], Great Crested Grebe (<i>Podiceps cristatus</i>) [A005], Pochard (<i>Aythya ferina</i>) [A059], Tufted Duck (<i>Aythya fuligula</i>) [A061]	F02.03, A05.01, A08, B	Leisure fishing, Animal breeding, Fertilisation, Sylviculture, forestry
004077	River Shannon and River Fergus Estuaries SPA	Whooper Swan (<i>Cygnus cygnus</i>) [A038], Redshank (<i>Tringa totanus</i>) [A162], Pintail (<i>Anas acuta</i>) [A054], Wetland and Waterbirds [A999], Lapwing (<i>Vanellus vanellus</i>) [A142], Shoveler (<i>Anas clypeata</i>) [A056], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Teal (<i>Anas crecca</i>) [A052], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Scaup (<i>Aythya marila</i>) [A062], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Wigeon (<i>Anas penelope</i>) [A050], Knot (<i>Calidris canutus</i>) [A143], Curlew (<i>Numenius arquata</i>) [A160], Greenshank (<i>Tringa nebularia</i>) [A164], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Shelduck (<i>Tadorna tadorna</i>) [A048], Cormorant (<i>Phalacrocorax carbo</i>) [A017], Dunlin (<i>Calidris alpina</i>) [A149]	G01.01, D03.02, A08, E02, E03, F01, E01	Nautical sports, Shipping lanes, Fertilisation, Industrial or commercial areas, Discharges, Marine and Freshwater Aquaculture, Urbanised areas, human habitation
004080	Boyne Estuary SPA	Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Shelduck (<i>Tadorna tadorna</i>) [A048], Lapwing (<i>Vanellus vanellus</i>) [A142], Sanderling (<i>Calidris alba</i>) [A144], Knot (<i>Calidris canutus</i>) [A143], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Little Tern (<i>Sterna albifrons</i>) [A195], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Wetland and Waterbirds [A999], Turnstone (<i>Arenaria interpres</i>) [A169], Golden	E01, G01.02, F01, G02.01, F02.03, J02.05, J02.11, I01, J02.01.02	Urbanised areas, human habitation, Walking, horseriding and non-motorised vehicles, Marine and Freshwater Aquaculture, Golf course, Leisure fishing, Modification of hydrographic functioning, general, Siltation rate changes, dumping, depositing of dredged deposits, Invasive non-native species, Reclamation of land from sea, estuary or marsh



Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		Plover (<i>Pluvialis apricaria</i>) [A140], Redshank (<i>Tringa totanus</i>) [A162]		
004096	Middle Shannon Callows SPA	Corncrake (<i>Crex crex</i>) [A122], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Wigeon (<i>Anas penelope</i>) [A050], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wetland and Waterbirds [A999], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Lapwing (<i>Vanellus vanellus</i>) [A142]	F03.01, D01.05, G01.01, G01.02, D01.01, A04, A03, F02.03, A08, A04.03, E01	Hunting, Bridge, viaduct, Nautical sports, Walking, horseriding and non-motorised vehicles, Paths, tracks, cycling tracks, Grazing, Mowing or cutting of grassland, Leisure fishing, Fertilisation, Abandonment of pastoral systems lack of grazing, Urbanised areas, human habitation
004097	River Suck Callows SPA	Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wigeon (<i>Anas penelope</i>) [A050], Lapwing (<i>Vanellus vanellus</i>) [A142], Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395], Whooper Swan (<i>Cygnus cygnus</i>) [A038], Wetland and Waterbirds [A999]	A04, G01.01, E01.03, F02.03, F03.01, A03, B, A08	Grazing, Nautical sports, Dispersed habitation, Leisure fishing, Hunting, Mowing or cutting of grassland, Sylviculture, forestry, Fertilisation
004102	Garriskil Bog SPA	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	B01, D01.04, A04, J02.05.02, A10, J01	Forest planting on open ground, Railway lines, TGV, Grazing, Modifying structures of inland water courses, Restructuring agricultural land holding, Fire and fire suppression
004139	Lough Croan Turlough SPA	Shoveler (<i>Anas clypeata</i>) [A056], Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wetland and Waterbirds [A999]	A08, A04	Fertilisation, Grazing
004232	River Boyne and River Blackwater SPA	Kingfisher (<i>Alcedo atthis</i>) [A229]	X, E01.03, E01, D01.02, J02	No threats or pressures, Dispersed habitation, Urbanised areas, human habitation, Roads, motorways, Human induced changes in hydraulic conditions



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

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Geyer's Whorl Snail (Vertigo geyeri)	[1013]	Loss of riverside and canalside habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Desmoulin's Whorl Snail (Vertigo moulinsiana)	[1016]	Loss of riverside and canalside habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
Freshwater Pearl Mussel (Margaritifera margaritifera)	[1029]	In stream works, hydrological and morphological alterations, sediment and enrichment, pollution due urbanisation etc. Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.
White-clawed Crayfish (Austroptamobius 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.
Twaite Shad (Alosa fallax fallax)	[1103]	Habitat quality, particularly at spawning sites is the most notable threat to this species.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Salmon (Salmo salar)	[1106]	Marine survival rates are of concern for the populations.	Disease, parasites and barriers to movement.



Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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 flow 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.
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.



Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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 (Glaucopuccinellietalia maritimae)	[1330]	Overgrazing; erosion; invasive species, particularly common cordgrass (<i>Spartina anglica</i>); infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.
Bottlenose Dolphin (<i>Tursiops truncatus</i>)	[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 (<i>Lutra lutra</i>)	[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.
Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	[1410]	Over-grazing by cattle or sheep; infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Coastal development and reclamation.
Killarney Fern (<i>Trichomanes speciosum</i>)	[1421]	Threatened by habitat loss, deliberate collection, encroachment of invasive or vigorous species, or indirectly by water pollution, removal of woodland or alteration of watercourses.	Land use management and direct impacts.
River Nore Freshwater Pearl Mussel (<i>Margaritifera durrovensis</i>)	[1990]	In stream works, hydrological and morphological alterations, sediment and enrichment, pollution due urbanisation etc. Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	Surface water dependent. Highly sensitive to hydrological change. Very highly sensitive to pollution.



Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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.
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.
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.
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(Ranunculo n 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.



Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Rivers with muddy banks with vegetation (Chenopodium rubrum p.p. and Bidens 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.
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.
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.
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.
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)	[6410]	Agricultural intensification; drainage; abandonment of pastoral systems.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	[6430]	Agricultural intensification; drainage; abandonment of pastoral systems.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)	[6510]	Agricultural intensification; drainage; abandonment of pastoral systems.	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.



Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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.
Transition mires and quaking bogs	[7140]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface water interactions. Groundwater isolated system with sensitivities related to the bog basin. Drainage and land use management are the key things.
Depressions on peat substrates of the Rhynchosporion	[7150]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and ground water interactions. Drainage and land use management are the key things.
Calcareous fens with species of mariscus sedge and bog cotton (Cladium mariscus and Caricion davallianae)	[7210]	Hydrological changes, pollution to surface waters, urbanisation, roads development, groundwater interactions, grazing and cultivation practices and the inappropriate use of pesticides.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Petrifying springs with tufa formation (Cratoneurion)	[7220]	Ground water interactions, on site management activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Alkaline fens	[7230]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
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 as per article 17 reporting from the National Parks and Wildlife Services

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A004	Little Grebe	Tachybaptus ruficollis ruficollis	Xxp/Xxt	No threats and pressures identified by the NPWS
A005	Great Crested Grebe	Podiceps cristatus	Xxp/Xxt	No threats and pressures identified by the NPWS
A017	Cormorant	Phalacrocorax carbo carbo	D01	Wind, wave and tidal power, including infrastructure
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



Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
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
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
A059	Common Pochard	Aythya ferina	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



Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A061	Tufted Duck	<i>Aythya fuligula</i>	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	<i>Aythya marila</i>	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
A065	Common Scoter	<i>Melanitta nigra</i>	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	<i>Bucephala clangula</i>	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
A122	Corn Crake	<i>Crex crex</i>	A03.01, A04.01, K03.04, M01.03	Intensive Mowing or intensification, Intensive grazing, Predation, Flooding and rising precipitations
A125	Eurasian Coot	<i>Fulica atra atra</i>	C03, G01, H01	Renewable abiotic energy use, Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish)
A130	Eurasian Oystercatcher	<i>Haematopus ostralegus</i>	C03, F01, F02, G01, H03, J02	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
A137	Common Ringed Plover	<i>Charadrius hiaticula</i>	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	<i>Pluvialis apricaria</i>	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	<i>Pluvialis squatarola</i>	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	<i>Vanellus vanellus</i>	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	<i>Calidris canutus</i>	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	<i>Calidris alba</i>	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	<i>Calidris alpina</i>	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
A156	Black-Tailed Godwit	<i>Limosa islandica</i>	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



Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A157	Bar-Tailed Godwit	<i>Limosa lapponica</i>	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	<i>Numenius arquata arquata</i>	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	<i>Tringa totanus</i>	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	<i>Tringa nebularia</i>	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	<i>Arenaria interpres</i>	C03, F01, G01, H03, J03, M01	Renewable abiotic energy use, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Marine water pollution, Other Ecosystem Modifications, Changes in abiotic conditions
A179	Black-Headed Gull	<i>Larus ridibundus</i>	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
A193	Common Tern	<i>Sterna hirundo</i>	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
A195	Little Tern	<i>Sterna albifrons albifrons</i>	C03, D01, I01, I02, M01	Renewable abiotic energy use, Roads, paths and railroads, Invasive non-native species, Problematic native species, Changes in abiotic conditions



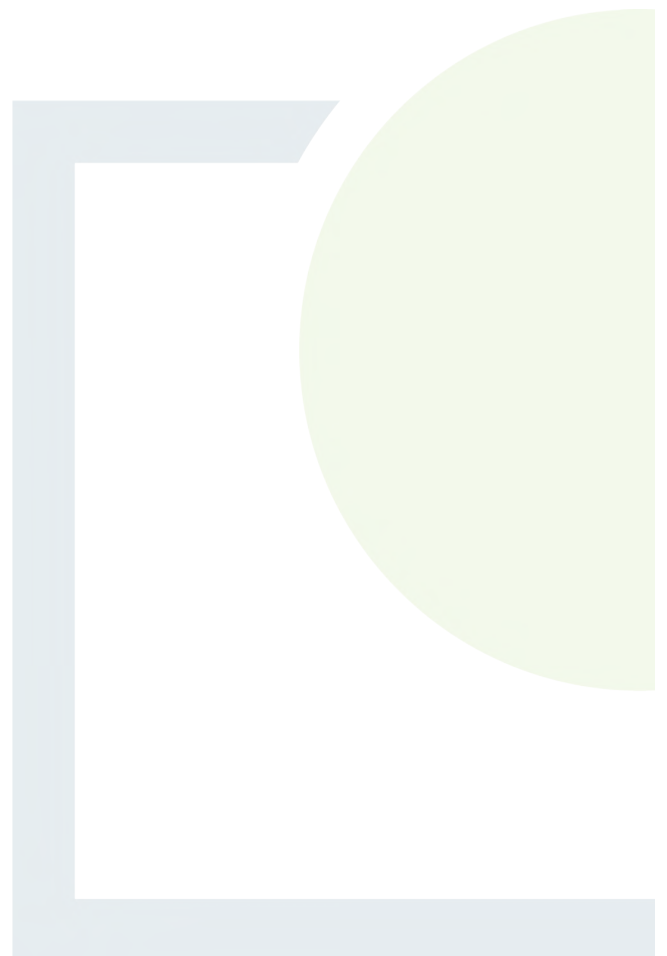
Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A229	Common Kingfisher	Alcedo atthis	A11, D01, G01, H01, I01, J02	Agriculture activities not referred to above, Roads, paths and railroads, Outdoor sports and leisure activities, recreational activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Invasive non-native species, Human induced changes in hydraulic conditions
A395	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 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 Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Appendix 2 - Table 1: Other Plans and Programmes

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)	<p>Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development.</p> <p>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.</p>	<p>Carry out an environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive.</p> <p>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.</p> <p>Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission.</p> <p>Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects.</p> <p>Inform relevant authorities and stakeholders on the decision to implement the plan or programme.</p> <p>Issue a statement to include requirements detailed in Article 9 of the Directive.</p> <p>Monitor and mitigate significant environmental effects identified by the assessment.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EIA Directive (2011/92/EU as amended)	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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
amended by 2014/52/EU)	likely to have significant effects on the environment. Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.	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.	environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Birds Directive (2009/147/EC)	Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats.	Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1.	Implementation of the Plan needs to comply with all environmental legislation and



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	<p>Protect, manage and control these species and comply with regulations relating to their exploitation.</p> <p>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.</p>	<p>Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas).</p> <p>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.</p> <p>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.</p>	<p>align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc.</p> <p>– the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>EU Bathing Water Directive (revised) 2006 [2006/7/EC]</p>	<p>The purpose of this Directive is to preserve, protect and improve the quality of the environment and to protect human health by complementing Directive 2000/60/EC</p>	<p>This Directive lays down provisions for:</p> <p>the monitoring and classification of bathing water quality;</p> <p>the management of bathing water quality; and</p> <p>the provision of information to the public on bathing water quality</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards –</p> <p>in combination with other users and bodies and their plans etc.</p> <p>– the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>EU Nitrates Directive (91/676/EC)</p>	<p>Reducing water pollution caused or induced by nitrates from agricultural sources and - preventing further such pollution.</p>	<p>Ireland’s Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland’s third NAP came into operation in 2014. Each Member State’s NAP must include:</p> <p>a limit on the amount of livestock manure applied to the land each year</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc.</p> <p>– the achievement of the</p>



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		set periods when land spreading is prohibited due to risk set capacity levels for the storage of livestock manure	objectives of the regulatory framework for environmental protection and management.
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions.	The IPPC Directive is based on several principles: an integrated approach best available techniques, flexibility; and public participation	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.
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Renewables Directive (2009/28/EC)	The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU.	The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in



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	<p>It requires the EU to fulfil at least 20% of its total energy needs with renewables by 2020 – to be achieved through the attainment of individual national targets.</p> <p>All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020.</p>	<p>The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables.</p> <p>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.</p> <p>Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports.</p>	<p>combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Indirect Land Use Change Directive (2012/0288(COD))</p>	<p>Article 3(4) of Directive 2009/28/EC of the European Parliament and of the Council (3) requires Member States to ensure that the share of energy from renewable energy sources in all forms of transport in 2020 is at least 10 % of their final energy consumption.</p> <p>The blending of biofuels is one of the methods available for Member States to meet this target, and is expected to be the main contributor.</p> <p>Other methods available to meet the target are the reduction of energy consumption, which is imperative because a mandatory percentage target for energy from renewable sources is likely to become increasingly difficult to achieve sustainably if overall demand for energy for transport continues to rise, and the use of electricity from renewable energy sources.</p>	<p>Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive;</p> <p>Improve the greenhouse gas performance of biofuel production processes (reducing associated emissions) by raising the greenhouse gas saving threshold for new installations subject to protecting installations already in operation on 1st July 2014;</p> <p>Encourage a greater market penetration of advanced (low-ILUC) biofuels by allowing such fuels to contribute more to the targets in the Renewable Energy Directive than conventional biofuels;</p> <p>Improve the reporting of greenhouse gas emissions by obliging Member States and fuel suppliers to report the estimated indirect land-use change emissions of biofuels.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Alternative Fuels Infrastructure Directive (2014/94/EU)</p>	<p>This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise</p>	<p>This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively</p>



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	dependence on oil and to mitigate the environmental impact of transport.	by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements.	contribute towards – in 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 Energy Efficiency Directive (2012/27/EU)	Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption.	<p>Energy distributors or retail energy sales companies have to achieve 1.5% energy savings per year through the implementation of energy efficiency measures</p> <p>EU countries can opt to achieve the same level of savings through other means, such as improving the efficiency of heating systems, installing double glazed windows or insulating roofs</p> <p>The public sector in EU countries should purchase energy efficient buildings, products and services</p> <p>Every year, governments in EU countries must carry out energy efficient renovations on at least 3% (by floor area) of the buildings they own and occupy</p> <p>Energy consumers should be empowered to better manage consumption. This includes easy and free access to data on consumption through individual metering</p> <p>National incentives for SMEs to undergo energy audits</p> <p>Large companies will make audits of their energy consumption to help them identify ways to reduce it</p> <p>Monitoring efficiency levels in new energy generation capacities.</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
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	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:	Implementation of the Plan needs to comply with all environmental legislation and



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	<p>consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.</p>	<p>Classification, labelling and packaging of chemicals; The Union's Civil Protection Mechanism; The Security Union Agenda including CBRN-E and Protection of critical infrastructure; Policy on environmental liability and on the protection of the environment through criminal law; Safety of offshore oil and gas operations.</p>	<p>align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>EU Maritime Spatial Planning Directive (2014/89/EU)</p>	<p>This Directive establishes a framework for maritime spatial planning aimed at promoting the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources.</p>	<p>Each Member State shall establish and implement maritime spatial planning. In doing so, Member States shall take into account land-sea interactions. The resulting plan or plans shall be developed and produced in accordance with the institutional and governance levels determined by Member States. This Directive shall not interfere with Member States' competence to design and determine the format and content of that plan or those plans. Maritime spatial planning shall aim to contribute to the objectives listed in Article 5 and fulfil the requirements laid down in Articles 6 and 8. When establishing maritime spatial planning, Member States shall have due regard to the particularities of the marine regions, relevant existing and future activities and uses and their impacts on the environment, as well as to natural resources, and shall also take into account land-sea interactions. Member States may include or build on existing national policies, regulations or mechanisms that have been or are</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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		being established before the entry into force of this Directive, provided they are in conformity with the requirements of this Directive.	
UK Marine Policy Statement	Achieving a sustainable marine economy Ensuring a strong, healthy and just society Living within environmental limits Promoting good governance Using sound science responsibly	The MPS will facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the high level marine objectives and thereby: Promote sustainable economic development; Enable the UK's move towards a low-carbon economy, in order to mitigate the causes of climate change and ocean acidification and adapt to their effects; Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and heritage assets; and Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues	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.
Marine and Coastal Access Act 2009	Aims to provide the legal mechanism to help ensure clean, healthy, safe, productive and biologically diverse oceans and seas by putting in place a new system for improved management and protection of the marine and coastal environment.	The Marine Act comprises eight key elements: Marine Management Organisation (MMO) Strategic Marine Planning System Streamlined Marine Licensing System Marine Nature Conservation Fisheries Management and Marine Enforcement Migratory and Freshwater Fisheries Coastal Access Coastal and Estuarine Management	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



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			framework for environmental protection and management.
Marine (Northern Ireland) Act 2013	Aims to provide for marine plans in relation to the Northern Ireland inshore region; to provide for marine conservation zones in that region; to make further provision in relation to marine licensing for certain electricity works in that region; and for connected purposes.	The Marine Act sets out a new framework for Northern Ireland's seas based on: a system of marine planning that will balance conservation, energy and resource needs; improved management for marine nature conservation and the streamlining of marine licensing for some electricity projects. The main provisions of the Act are outlined below: Marine Planning Nature Conservation Marine Licensing	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.
European Union Biodiversity Strategy to 2020	Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy. Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible.	Outlines six targets and twenty actions to aid European Union in halting the loss to biodiversity and eco-system services. The six targets cover: Full implementation of EU nature legislation to protect biodiversity Maintaining, enhancing and protecting for ecosystems, and green infrastructure Ensuring sustainable agriculture, and forestry Sustainable management of fish stocks Reducing invasive alien species Addressing the global need to contribute towards averting global biodiversity loss	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.
Biodiversity Strategy for 2030 - Bringing nature back	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	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	Where new land use developments or activities occur as a result of this legislation, plan, programme,



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into our lives (European Commission, 2020)	biodiversity on a path to recovery by 2030, and contains specific actions and commitments.	<p>sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards</p> <p>– in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	<p>Promoting GI in the main EU policy areas.</p> <p>Supporting EU-level GI projects.</p> <p>Improving access to finance for GI projects.</p> <p>Improving information and promoting innovation.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
UNESCO (1972) The Convention	links concepts of nature conservation and the preservation of cultural properties; and	sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them;	Where new land use developments or activities



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for the Protection of the World Cultural and Natural Heritage	recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.	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.	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory



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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.	framework for environmental protection and management. 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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	<p>The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions.</p> <p>The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol.</p> <p>At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate</p>	<p>The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II).</p> <p>EU member states implement measures to improve on or complement the specified measures and policies arising from the ECCP.</p> <p>Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system.</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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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	change by limiting global warming to well below 2°C.		
EU 2020 Climate and Energy Package	<p>Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020.</p> <p>Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels.</p> <p>Aims to raise the share of EU energy consumption produced from renewable resources to 20%.</p> <p>Achieve a 20% improvement in the EU's energy efficiency.</p>	<p>Four pieces of complimentary legislation:</p> <p>Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps.</p> <p>Member States have agreed national targets for non-EU ETS emissions from countries outside the EU.</p> <p>Meet the national renewable energy targets of 16% for Ireland by 2020.</p> <p>Preparing a legal framework for technologies in carbon capture and storage.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EU 2030 Framework for Climate and Energy	<p>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.</p> <p>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.</p>	<p>To meet the targets, the European Commission has proposed the following policies for 2030:</p> <p>A reformed EU emissions trading scheme (ETS).</p> <p>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.</p> <p>First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
The Clean Air for Europe Directive (2008/50/EC) (EU Air Framework Directive)	<p>The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive).</p>	<p>Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole.</p> <p>Aims to assess the ambient air quality in Member States on the basis of common methods and criteria.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in</p>



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<p>Fourth Daughter Directive (2004/107/EC)</p>	<p>Sets new air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives.</p> <p>Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values.</p> <p>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.</p> <p>The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.</p>	<p>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.</p> <p>Ensures that such information on ambient air quality is made available to the public.</p> <p>Aims to maintain air quality where it is good and improving it in other cases.</p> <p>Aims to promote increased cooperation between the Member States in reducing air pollution.</p>	<p>combination with other users and bodies and their plans etc.</p> <p>– the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Noise Directive (2002/49/EC)</p>	<p>The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.</p>	<p>The Directive requires competent authorities in Member States to:</p> <p>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;</p> <p>Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and</p> <p>Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.</p> <p>The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc.</p> <p>– the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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Floods Directive (2007/60/EC)	<p>Establishes a framework for the assessment and management of flood risks</p> <p>Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community</p>	<p>Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment</p> <p>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.</p> <p>Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above.</p> <p>Inform the public and allow the public to participate in planning process.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Water Framework Directive (2000/60/EC)	<p>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.</p> <p>Preserve and prevent the deterioration of water status and where necessary improve and maintain “good status” of water bodies.</p> <p>Promote sustainable water usage.</p> <p>The Water Framework Directive repealed the following Directives:</p> <p>The Drinking Water Abstraction Directive</p> <p>Sampling Drinking Water Directive</p> <p>Exchange of Information on Quality of Surface Freshwater Directive</p> <p>Shellfish Directive</p> <p>Freshwater Fish Directive</p>	<p>Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive.</p> <p>Achieve "good status" for all waters.</p> <p>Manage water bodies based on identifying and establishing river basins districts.</p> <p>Involve the public and streamline legislation.</p> <p>Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas.</p> <p>Establish a programme of monitoring for surface water status, groundwater status and protected areas.</p> <p>Recover costs for water services.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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	<p>Groundwater Directive Dangerous Substances Directive</p>		
<p>Groundwater Directive (2006/118/EC)</p>	<p>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.</p>	<p>Meet minimum groundwater standards listed in Annex 1 of Directive. Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Drinking Water Directive (98/83/EC)</p>	<p>Improve and maintain the quality of water intended for human consumption. Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.</p>	<p>Set values applicable to water intended for human consumption for the parameters set out in Annex I. Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a). Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5. Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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		<p>Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action.</p> <p>Undertake remedial action to restore the quality of the water where necessary to protect human health.</p> <p>Notify consumers when remedial action is being undertaken except where the competent authorities consider the non-compliance with the parametric value to be trivial.</p>	
<p>Urban Waste Water Treatment Directive (91/271/EEC)</p>	<p>This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors.</p> <p>The objective of the Directive is to protect the environment from the adverse effects of waste water discharges.</p>	<p>Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment.</p> <p>Annex II requires the designation of areas sensitive to eutrophication which receive water discharges.</p> <p>Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU</p>	<p>Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.</p>	<p>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.</p> <p>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.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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		<p>Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7.</p> <p>The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive.</p> <p>The competent authority shall be entitled to initiate cost recovery proceedings against the operator.</p> <p>The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met.</p> <p>The Environmental Liability Directive has been amended through a number of Directives that are not of significant relevance to the SEA for the Guidelines. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing knowledge and new needs.</p>	
<p>Marine Strategy Framework Directive (2008/56/EC), as amended</p>	<p>The aim of the European Union's ambitious Marine Strategy Framework Directive is to protect more effectively the marine environment across Europe.</p>	<p>The Directive provides various requirements, including:</p> <ul style="list-style-type: none"> Completion of an initial assessment of Irish marine waters; Establishment of establish environmental targets and indicators; Establishment of a monitoring programme; Establishment of a programme of measures; and 	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the</p>



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		<p>Implementation of the programme of measures and monitoring programme.</p> <p>Implementation of the Directive is contributed towards by a set of detailed criteria and methodological standards that were revised in 2017 leading to a Commission Decision on “laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment, and repealing Decision 2010/477/EU”. Annex III “Indicative lists of characteristics, pressures and impacts” of the Directive was amended in 2017.</p>	<p>achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Convention on the Protection of the Archaeological Heritage (Valletta 1992)</p>	<p>The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.</p>	<p>The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)</p>	<p>The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co- operation among the Parties. It establishes the principles of "European co-ordination of conservation</p>	<p>The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties.</p> <p>The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co-operation between states and regions.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of</p>



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	policies" including consultations regarding the thrust of the policies to be implemented.		the regulatory framework for environmental protection and management.
<p>ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')</p>	<p>It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.</p>	<p>(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.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)</p>	<p>Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time. A heritage community consists of people who value specific aspects of cultural heritage which</p>	<p>Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights. Recognise individual and collective responsibility towards cultural heritage. Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal. Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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	they wish, within the framework of public action, to sustain and transmit to future generations.	Greater synergy of competencies among all the public, institutional and private actors concerned.	
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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. 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.	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.



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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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities.	The Bali Action Plan is centred on four main building Blocks: mitigation adaptation technology financing	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.



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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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Common Agricultural Policy	To improve agricultural productivity, so that consumers have a stable supply of affordable food; and	ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future;	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively



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	To ensure that EU farmers can make a reasonable living.	Climate change and sustainable management of natural resources; Looking after the countryside across the EU and keeping the rural economy alive.	contribute towards – in 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)	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 To target additional POPs	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.



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		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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
OSPAR Convention	The mission of OSPAR is to conserve marine ecosystems and safeguard human health in the North-East Atlantic by preventing and eliminating pollution; by protecting the marine environment from the adverse effects of human activities; and by contributing to the sustainable use of the seas.	OSPAR's work is organised under six strategies: Biodiversity and Ecosystem Strategy Eutrophication Strategy Hazardous Substances Strategy Offshore Industry Strategy Radioactive Substances Strategy Strategy for the Joint Assessment and Monitoring Programme These six strategies fit together to underpin the ecosystem approach. For each strategy a programme of work is designed and implemented annually.	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.



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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: 75 % of the population aged 20-64 should be employed; 3% of the EU’s GDP should be invested in R&D; the “20/20/20” climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 20 million less people should be at risk of poverty.	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.
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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	Where new land use developments or activities occur as a result of this legislation, plan,



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		contains legislative proposals to implement stricter standards for emissions and air pollution.	programme, etc., individually or in combination with others, potential in combination effects may arise. 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.
National Level			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan (2021 - 2030)	<p>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</p> <p>- from villages to cities, and everything around and in between.</p> <p>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</p>	<p>The National Planning Framework published alongside the National Development Plan yields ten National Strategic Outcomes as follows:</p> <ul style="list-style-type: none"> Compact Growth Enhanced Regional Accessibility Strengthened Rural Economies and Communities Sustainable Mobility A Strong Economy, supported by Enterprise, Innovation and Skills High-Quality International Connectivity Enhanced Amenity and Heritage Transition to a Low-Carbon and Climate-Resilient Society Sustainable Management of Water and other Environmental Resources 	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.



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	cater for an expected population increase of over 1 million people.	Access to Quality Childcare, Education and Health Services	
Planning, Land Use and Transport Outlook 2040 [In Preparation]	<p>The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will:</p> <p>Quantify in broad terms the appropriate scale of financial investment in land transport over the long term;</p> <p>Consider how fiscal, environmental and technological developments might impact on this investment; and,</p> <p>Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates the objectives of Project Ireland 2040.</p>	In preparation.	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.
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.	<p>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.</p> <p>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.</p> <p>Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large scale projects.</p> <p>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</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.



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		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.	
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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	The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively



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	respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	waste facilities, measures to reduce the production of waste and/or promote its recovery.	contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009 (S.I. 296 of 2009)	The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	<p>Actions:</p> <p>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).</p> <p>Require the production of sub-basin management plans with programmes of measures to achieve these objectives.</p> <p>Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Groundwater) Regulations 2016 (S.I. No. 366 of 2016)	To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	<p>The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values.</p> <p>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.</p> <p>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</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.



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		<p>Protection Agency (EPA) must consider when establishing threshold values</p> <p>Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established</p>	
<p>European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)</p>	<p>These Regulations, which give effect to Ireland's 3rd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources</p>	<p>The Regulations include measures such as:</p> <ul style="list-style-type: none"> Periods when land application of fertilisers is prohibited Limits on the land application of fertilisers Storage requirements for livestock manure; and Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality. 	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc.</p> <p>– the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Bathing Water Quality Regulations 2008 (S.I. 79 of 2008)</p>	<p>These Regulations provide for transposition of the EU Bathing Water Directive 2006 (Directive 2006/7/EC of 15 February 2006) which aims:</p> <ul style="list-style-type: none"> To improve health protection for bathers To establish a more pro-active approach to management of bathing waters, and To promote increased public involvement and dissemination of information to the public. 	<p>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.</p> <p>Local authorities must take appropriate measures with a view to improving waters which are classified as “poor” and increasing the number of bathing waters classified as “good” or “excellent”.</p> <p>A permanent advice against bathing must be issued in a case where a bathing water is classified as “poor” for five consecutive years.</p> <p>Local authorities are required annually to identify bathing waters, establish a monitoring calendar, carry out the specified</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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		<p>monitoring, report the results to the EPA, carry out appropriate management measures where necessary and provide information to the public.</p> <p>There must be public participation in the identification of waters and the general implementation of the Regulations.</p> <p>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.</p> <p>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.</p> <p>Private controllers of access lands may be required to contribute towards the costs incurred by a local authority or the EPA.</p>	
<p>Bathing Water Quality (Amendment) Regulations 2011 (S.I 351 of 2011)</p>	<p>This Regulation defines further the minimum number of bathing water samples required to carry out a bathing water quality assessment.</p>	<p>Further defines the minimum number of bathing water samples required to carry out a bathing water quality assessment.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Climate Action and Low Carbon Development</p>	<p>An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low</p>	<p>When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in</p>



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(Amendment) Act 2021	carbon, climate resilient and environmentally sustainable economy.	<p>that are cost effective and shall, for that purpose, have regard to:</p> <p>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,</p> <p>The policy of the Government on climate change, Climate justice,</p> <p>Any existing obligation of the State under the law of the European Union or any international agreement referred to in section 2; and</p> <p>The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas emissions, prepared by the Agency.</p>	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 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 Plan needs to comply with all environmental legislation and align with and 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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Ireland's Second National Implementation Plan for the Sustainable Development Goals (2022 - 2024)	<p>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).</p> <p>The first version of the Plan (2018 – 2020) provided a 'SDG Matrix' which identifies the responsible Government Departments for each of the 169 targets. It also included a 'SDG Policy Map' indicating the relevant national policies for each of the targets.</p>	<p>The Plan identifies five strategic objectives to guide implementation:</p> <ul style="list-style-type: none"> To embed the SDG framework into the work of Government Departments to achieve greater Policy Coherence for Sustainable Development; To integrate the SDGs into Local Authority work to better support the localisation of the SDGs; Greater partnerships for the Goals; To further incorporate the principle of Leave No One Behind into Ireland's Agenda 2030 implementation and reporting mechanisms; and Strong reporting mechanisms 	<p>environmental protection and management.</p> <p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Infrastructure and Capital Investment Plan (2016-2021)	<p>€27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to 2021 will help to lay the foundations for continued growth in Ireland.</p>	<p>This Capital Plan reflects the Government's commitment to supporting strong and sustainable economic growth and raising welfare and living standards for all.</p> <p>It includes allocations for new projects across a number of key areas and funding to ensure that the present stock of national infrastructure is refreshed and maintained.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the	<p>The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.</p>	<p>The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in</p>



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European Commission)			combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for Renewable Energy (2012-2020)	The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most cost efficient manner for consumers. Of critical importance is the role which the renewable energy s activity as part of the Government's action plan for jobs sector plays in job creation and economic	This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020: Increasing on and offshore wind, Building a sustainable bioenergy sector, Fostering R&D in renewables such as wave & tidal, Growing sustainable transport; and Building out robust and efficient networks.	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.
National Climate Mitigation Plan 2017	The Plan represents an initial step to set Ireland on a pathway to achieve the deep decarbonisation required in Ireland by mid-century in line with the Government's policy objectives.	The National Mitigation Plan focuses on the following issues: Climate Action Policy Framework Decarbonising Electricity Generation Decarbonising the Built Environment Decarbonising Transport An Approach to Carbon Neutrality for Agriculture, Forest and Land Use Sectors	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.
National Policy Position on Climate Action and Low	The National Policy Position provides a high-level policy direction for the adoption and implementation by Government of plans to	National climate policy in Ireland: Recognises the threat of climate change for humanity;	Implementation of the Plan needs to comply with all environmental legislation and



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Carbon Development (2014)	<p>enable the State to move to a low carbon economy by 2050.</p> <p>Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015.</p>	<p>Anticipates and supports mobilisation of a comprehensive international response to climate change, and global transition to a low-carbon future;</p> <p>Recognises the challenges and opportunities of the broad transition agenda for society; and</p> <p>Aims, as a fundamental national objective, to achieve transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050.</p>	<p>align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
Clean Air Strategy for Ireland (2023)	<p>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.</p>	<p>Through this document Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation.</p> <p>The Strategy should also help tackle climate change.</p> <p>The Strategy considers a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture.</p> <p>In any discussion relating to clean air policy, the issue of people’s health is paramount, this is a strong theme of the Strategy.</p>	<p>Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
EirGrid’s Grid25 Strategy and associated Grid25 Implementation Programme 2017 - 2022	<p>EirGrid’s mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland.</p> <p>“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.”</p>	<p>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.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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All Island Grid Study 2008	<p>The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network (“the grid”) on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources.</p> <p>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.</p>	<p>Key conclusions of the study:</p> <p>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.</p> <p>All but the high coal-based portfolio lead to significant reductions of CO2 emissions compared to portfolio 1</p> <p>All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports.</p> <p>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.</p> <p>Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered.</p> <p>Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
Strategy for the Future Development of National and Regional Greenways (2018)	<p>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.</p> <p>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</p>	<p>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;</p> <p>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;</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for</p>



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	<p>number of people using Greenways as a visitor experience and as a recreational amenity.</p>	<p>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</p> <p>Greenways that provide opportunities for the development of local businesses and economies, and</p> <p>Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.</p>	<p>environmental protection and management.</p>
<p>National Water Resources Plan (2021)</p>	<p>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.</p> <p>The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment.</p>	<p>The key objectives of the plan are to:</p> <p>Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions</p> <p>Assess the current and future water demand from homes, businesses, farms, and industry</p> <p>Consider the impacts of climate change on Ireland’s water resources</p> <p>Develop a drought plan advising measures to be taken before and during drought events</p> <p>Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water</p> <p>Identify, develop and assess options to help meet potential shortfalls in water supplies</p> <p>Assess the water resources available at a national level including lakes, rivers and groundwater</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc.</p> <p>– the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Draft National Strategic Plan for Aquaculture</p>	<p>“This multi-annual National Strategic Plan Sustainable Aquaculture Development (2022 – 2030) (NSPSA) overlaps with the EU’s new</p>	<p>Develop ‘Designated Marine Area Plans’ (DMAPs) for aquaculture to ensure that the sector is championed in</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and</p>



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Development 2030 [Awaiting publication]	‘Strategic guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030’, as well as the programming period (2021 to 2027) of the European Maritime Fisheries and Aquaculture Fund (EMFAF). As such, this plan provides the strategic vision and framework for funding under EMFAF, as well as other EU and national initiatives.”	Ireland’s Marine Spatial Plan to facilitate investment in different forms of sustainable aquaculture. More vigilant and responsive monitoring if aquatic diseases and food safety risks. Develop a comprehensive human capacity plan for Irish aquaculture to promote the sector as an attractive career option, develop leadership, management and business capacity in the sector and provide the necessary skills required over the strategy time period. Provide coordinated messaging on the sustainable, low carbon nature of Irish aquaculture production, supported by independent certification and open dialogue.	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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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Sustainable Development: A Strategy for Ireland (1997)	The overall aim of this Strategy is to ensure that economy and society in Ireland can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community.	The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable.	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.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	<p>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.</p> <p>Landscape Strategy Vision: “Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning.”</p>	<p>The objectives of the National Landscape Strategy are to:</p> <ul style="list-style-type: none"> Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape; Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible. 	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.



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National Hazardous Waste Management Plan (EPA) 2021 - 2027	<p>This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published.</p> <p>Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period:</p> <ul style="list-style-type: none"> To prevent and reduce the generation of hazardous waste by industry and society generally; To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste; To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export; To minimise the environmental, health, social and economic impacts of hazardous waste generation and management. 	<p>The revised Plan makes 20 recommendations under the following topics:</p> <ul style="list-style-type: none"> Policy and Regulation Prevention Collection and Treatment Implementation 	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
National Ports Policy 2013	<p>The core objective of National Ports Policy is to facilitate a competitive and effective market for maritime transport services.</p>	<p>National Ports Policy introduces clear categorisation of the ports sector into Ports of National Significance (Tier 1), Ports of National Significance (Tier 2) and Ports of Regional Significance.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the</p>



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			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: 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.	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; 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	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.
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of



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			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 wellbeing is valued and supported at every level of society and is everyone’s responsibility.”	These four goals are interlinked, interdependent and mutually supportive: Goal 1: Increase the proportion of people who are healthy at all stages of life Goal 2: Reduce health inequalities Goal 3: Protect the public from threats to health and wellbeing Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Marine Planning Framework 2021	The NMPF is a key consideration for decision makers on all marine authorisations. The NMPF creates the overarching framework for decision making that is consistent, evidence based, and secures a sustainable future for the maritime area.	The National Marine Planning Framework is a succinct strategic document that will deal with, inter alia, the following environmental, social and economic issues: Key marine activities such as fisheries, tourism, transport, offshore renewable energy generation, oil and gas exploration and production, aquaculture, and how they interact; Climate change and related impacts; Communities and health; Cultural heritage; Marine environment and biodiversity; Transboundary interactions with other jurisdictions.	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.
Tourism Action Plan 2019 - 2021	Includes a total of 27 actions to be addressed in the period between now and 2018 aimed at securing continued growth in overseas tourism revenue and employment.	23 actions address a range of key issues, including the marketing of Ireland as a visitor destination overseas, visitor access to and within Ireland, the effective presentation of Irish culture, sport, and events to visitors, the role of Local	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively



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		<p>Authorities in supporting tourism, visitor accommodation capacity, and skills development in the tourism sector. The actions are directed at specific tourism stakeholders in the public and private sectors, all of whom are expected to proactively work towards completion of each action within the specified timeframe.</p>	<p>contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025</p>	<p>The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.</p>	<p>The Tourism Policy Statement sets three headline targets to be achieved by 2025: Overseas tourism revenue of €5 billion per year net of inflation excluding carrier receipts; 250,000 people employed in tourism; and 10 million overseas visitors to Ireland per year.</p>	<p>Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Tourism 2020: Tourism Strategy for Northern Ireland to 2020</p>	<p>Northern Ireland's Tourism Strategy until 2020 Vision is to “Create the new Northern Ireland experience and get it on everyone’s destination wish list” Details an Action Plan to achieving targets for People, Products and Places, Promotion and Partnership</p>	<p>Sets targets for: Increasing visitor numbers Increasing tourism earnings Accelerating visitor spend Targeting specific markets and segments Supporting indigenous high quality businesses</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of</p>



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		<p>Being visitor inspired</p> <p>Plan provides for development of at least 22 key sites on Causeway Coastal Route</p>	<p>the regulatory framework for environmental protection and management.</p>
<p>Our Sustainable Future: A framework for Sustainable Development for Ireland 2012</p>	<p>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.</p>	<p>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.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)</p>	<p>Outlines a policy for how a sustainable travel and transport system can be achieved.</p> <p>Sets out five key goals:</p> <ul style="list-style-type: none"> To reduce overall travel demand. To maximise the efficiency of the transport network. To reduce reliance on fossil fuels. To reduce transport emissions. To improve accessibility to transport. 	<p>Others lower level aims include:</p> <ul style="list-style-type: none"> reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies strengthening institutional arrangements to deliver the targets 	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Investment Framework for Transport in Ireland (NIFTI) 2021</p>	<p>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.</p>	<p>The four investment priorities stated in NIFTI are:</p> <ul style="list-style-type: none"> Mobility of people and goods in urban areas. Protection and renewal. 	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively</p>



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	<p>The NIFTI will guide transport investment in the years ahead to enable the National Planning Framework, support the Climate Action Plan, and promote social, environmental and economic outcomes throughout Ireland.</p>	<p>Enhanced regional and rural connectivity. Decarbonisation.</p>	<p>contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)</p>	<p>White paper setting out a framework for delivering a sustainable energy future in Ireland. Outlines strategic Goals for: Security of Supply Sustainability of Energy Competitiveness of Energy Supply</p>	<p>The underpinning Strategic Goals are: Ensuring that electricity supply consistently meets demand Ensuring the physical security and reliability of gas supplies to Ireland Enhancing the diversity of fuels used for power generation Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks Creating a stable attractive environment for hydrocarbon exploration and production Being prepared for energy supply disruptions</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans (including transport)</p>	<p>NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to avail of any positive effects that may occur</p>	<p>Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance based actions. Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.	2030 will represent a significant milestone, meaning: 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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Renewable Energy Action Plan (2010)	Sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Including Ireland's 16% target of gross final consumption to come from renewables by 2020.	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.
National Energy Efficiency Action Plan for Ireland (2009 – 2020)	This is the second National Energy Efficiency Action Plan for Ireland.	The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate.	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



Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Actions for Biodiversity (2017- 2021) Ireland's National Biodiversity Plan	Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally.	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.



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National Broadband Plan (2012)	Sets out the strategy to deliver high speed broadband throughout Ireland.	<p>The Plan sets out:</p> <p>A clear statement of Government policy on the delivery of High Speed Broadband.</p> <p>Specific targets for the delivery and rollout of high speed broadband and the speeds to be delivered.</p> <p>The strategy and interventions that will underpin the successful implementation of these targets.</p> <p>A series of specific complementary measures to promote implementation of Government policy in this area.</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)	<p>Sets out comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process.</p> <p>Ensures flood risk is a key consideration in preparing land use plans and in the assessment of planning applications.</p> <p>Implementation of the Guidelines is through actions at national, regional, local authority and site-specific levels.</p> <p>Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.</p>	<p>Avoid inappropriate development in areas at risk of flooding.</p> <p>Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off.</p> <p>Ensure effective management of residual risks for development permitted in floodplains.</p> <p>Avoid unnecessary restriction of national, regional or local economic and social growth.</p> <p>Improve the understanding of flood risk among relevant stakeholders.</p> <p>Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management.</p> <p>The 2009 Flood Risk Management Guidelines were amended by Circular PL 2/2014 (Department of the Environment, Community and Local Government) that provides advice on the use of OPW flood mapping in assessing planning applications and clarifies some advice from the 2009 Guidelines.</p>	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
<p>European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)</p> <p>European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)</p> <p>European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)</p>	<p>Transpose the Water Framework Directive into legislation.</p> <p>Outlines the general duty of public authorities in relation to water.</p> <p>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.</p>	<p>Implements River basin districts and characterisation of RBDs and River Basin Management Plans.</p> <p>Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs.</p> <p>Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies.</p> <p>Allows the competent authority to recover the cost of damage/destruction of status of water body.</p> <p>Outlines environmental objectives and programme of measures and environmental quality standards for priority substances.</p> <p>Outlines criteria for assessment of groundwater.</p> <p>Outlines environmental objectives to be achieved for surface water bodies.</p> <p>Outlines surface water quality standards.</p> <p>Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)</p>	<p>Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.</p>	<p>Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality.</p> <p>Sets groundwater quality standards.</p> <p>Outlines threshold values for the classification and protection of groundwater.</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



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<p>Local Government (Water Pollution) Acts 1977 to 1990</p>	<p>The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.</p>	<p>The Water Pollution Acts enable local authorities to:</p> <ul style="list-style-type: none"> Prosecute for water pollution offences. Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters. Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution. issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects. Prepare water quality management plans for any waters in or adjoining their functional areas. 	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Water Services Act 2007 Water Services (Amendment) Act 2012 Water Services Act (No. 2) 2013</p>	<p>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 waste water 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.</p>	<p>Key strategic objectives include:</p> <ul style="list-style-type: none"> Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced. 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 	<p>Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>



Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		<p>with the requirements of the EU Urban Wastewater Treatment Directive.</p> <p>Promoting water conservation through Irish Water’s Capital Investment Plan, the Rural Water Programme and other measures.</p> <p>Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems.</p> <p>Ensuring a fair funding model to deliver water services.</p> <p>Overseeing the establishment of an economic regulation function under the CER.</p>	
<p>Irish Water’s (now known as Uisce Eireann) Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2020 - 2024)</p>	<p>This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.</p>	<p>Six strategic objectives as follows:</p> <ul style="list-style-type: none"> Meet Customer Expectations. Ensure a Safe and Reliable Water Supply. Provide Effective Management of Wastewater. Protect and Enhance the Environment. Support Social and Economic Growth. Invest in the Future. 	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.</p>
<p>Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas 2017 - 2022</p>	<p>Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs</p>	<p>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.</p> <p>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</p>	<p>Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of</p>



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		national network of NHAs.	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Action Plan 2015	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Rural Environmental Protection Scheme (REPS)	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.	Implementation of the 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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Agri-Environmental Options Scheme (AEOS) Green, Low-Carbon, Agri- environment Scheme (GLAS)		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.	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Forestry Programme (2014-2020)	Represents Ireland’s proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.	Measures include the following: Afforestation and Creation of Woodland Neighbour Wood Scheme Forest Roads Reconstitution Scheme Woodland Improvement Scheme Native Woodland Conservation Scheme Knowledge Transfer and Information Actions Producer Groups Innovative Forest Technology	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.



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		Forest Genetic Reproductive Material Forest Management Plans	
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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. 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.	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.



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		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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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. To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection 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	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	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in



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	European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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. The creation of 23,000 additional jobs all along the supply chain from producer level to high end value added product development.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Cycle Network Scoping Study 2010	Outlines objectives and actions aimed at developing a strong cycle network in Ireland	Sets a target where 10% of all journeys will be made by bike by 2020	Implementation of the Plan needs to comply with all environmental legislation and



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	Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative	align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategic Planning Policy Statement (SPPS) NI	The SPPS consolidates some twenty separate policy publications into one document and sets out strategic subject planning policy for a wide range of planning matters. It also provides the core planning principles to underpin delivery of the two-tier planning system with the aim of furthering sustainable development.	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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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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Regional/ County/Local Level			
Regional Economic and Spatial Strategies	The Regional Spatial and Economic Strategies provide a long-term regional level strategic planning and economic framework in support of the implementation of the National Planning Framework.	<p>The Eastern and Midland Regional Economic and Spatial Strategy includes provisions for its 12 constituent local authorities: Fingal County Council; Dublin City Council; South Dublin County Council; Dún Laoghaire-Rathdown County Council; Louth County Council; Kildare County Council; Meath County Council; Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council.</p> <p>The Southern Regional Economic and Spatial Strategy includes provisions for its nine constituent local authorities: Waterford City and County Council, Cork City Council, Cork County Council, Tipperary County Council, Wexford County Council, Kerry County Council, Clare County Council, Limerick City and County Council, Kilkenny County Council and Carlow County Council.</p> <p>The Northern and Western Regional Spatial and Economic Strategy includes provisions for its eight constituent local authorities: Donegal County Council, Leitrim County Council, Sligo County Council, Cavan County Council, Monaghan County Council, Mayo County Council, Roscommon County Council; and Galway County Council.</p>	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.
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.	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



Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			the regulatory framework for environmental protection and management.
GreaterDublin Area (GDA) Transport Strategy (2016-2035)	<p>It sets out how transport will be developed across the region, covering Dublin, Meath, Wicklow and Kildare, over the period of the strategy and has been approved by the Minister for Transport, Tourism and Sport in accordance with the relevant legislation.</p> <p>The Vision Statement: “The GDA by 2022 is an economically vibrant, active and sustainable international Gateway Region, with strong connectivity across the GDA Region, nationally and worldwide; a region which fosters communities living in attractive, accessible places well supported by community infrastructure and enjoying high quality leisure facilities; and promotes and protects across the GDA green corridors, active agricultural lands and protected natural areas.”</p> <p>Full SEA and Stage 2 AA have been undertaken on this Strategy</p>	<p>They set out a number of core principles deriving from the strategic vision, which are:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Development in the GDA shall be directly related to investment in integrated high quality public transport services and focused on compact urban form.</p> <p>Development within the existing urban footprint of the Metropolitan Area will be consolidated to achieve a more compact urban form</p> <p>Development in the Hinterland Area will be focused on the high quality integrated growth and consolidation of development in key identified towns, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses.</p>	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.
Transport Strategy for the Cork	The Strategy addresses all transport modes and its objective will be to provide a long-term	It will be used to inform transport investment levels and investment prioritisation over both the longer and shorter	Implementation of the Plan needs to comply with all



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Metropolitan Area 2040	strategic planning framework for the integrated development of transport infrastructure and services in the Cork Metropolitan Area, over the next two decades	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.	environmental legislation and align with and cumulatively contribute towards – in 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 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.	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 The Green Route Network being cycle routes for development of tourist, recreational and leisure purposes.	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.
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	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 Plan needs to comply with all environmental legislation and align with and 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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	routes, which will establish Ireland as a quality international tourism destination for a broad range of associated recreational activities and pursuits.		environmental protection and management.
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.	Aims to provide long-term policy direction with a strategic spatial perspective.	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.
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Port Masterplans (such as Dublin Port Masterplan 2012-2040 and 2017 Review)	The Masterplan sets out a vision for the operations of the port and land utilisation. The Masterplan is a non-statutory plan which has nonetheless been framed within the context of	Not applicable	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in



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	EU, national, regional and local development plan policies.		combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	<p>Management planning for nature conservation sites has a number of aims. These include:</p> <ul style="list-style-type: none"> To identify and evaluate the features of interest for a site To set clear objectives for the conservation of the features of interest To describe the site and its management To identify issues (both positive and negative) that might influence the site To set out appropriate strategies/management actions to achieve the objectives 	<p>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.</p> <p>These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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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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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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	<p>Outlines planning objectives for land use development (including transport objectives).</p> <p>Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies.</p> <p>Sets out the policies and proposals to guide development in the specific Local Authority area.</p>	<p>Identifies future infrastructure, development and zoning required.</p> <p>Protects and enhances amenities and environment.</p> <p>Guides planning authority in assessing proposals.</p> <p>Aims to guide development in the area and the amount of nature of the planned development.</p> <p>Aims to promote sustainable development.</p> <p>Provide for economic development and protect natural environmental, heritage.</p>	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Green Infrastructure Plans/Strategies	<p>Promotes the maintenance and improvement of green infrastructure in an area.</p> <p>Aims to protect and enhance biodiversity and habitats.</p>	not applicable	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



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



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			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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in



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		Addresses the specific pressures acting on water quality in each area.	combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional Waste Management Plans	These plans (for the Connacht-Ulster, Southern, and Eastern-Midlands regions) give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in 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 Climate Change Action Plans 2019 - 2024	Dublin’s four local authorities have joined together to develop Climate Change Action Plans as a collaborative response to the impact that climate change is having, and will continue to have, on the Dublin Region and its citizens. While each plan is unique to its functional area, they are unified in their approach to climate change adaptation and mitigation, and their commitment to lead by example in tackling this global issue.	The Climate Change Action Plan features a range of actions across five key areas - Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management - that collectively address the four targets of this plan: A 33% improvement in the Council’s energy efficiency by 2020 A 40% reduction in the Council’s greenhouse gas emissions by 2030 To make Dublin a climate resilient region, by reducing the impacts of future climate change - related events To actively engage and inform citizens on 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 achievement of the objectives of the regulatory framework for environmental protection.
Noise Action Plans	The Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory	The main purpose of the Noise Action Plan is to:	Implementation of the Plan needs to comply with all environmental legislation and



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	<p>Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to meeting the requirements of the Directive in Ireland.</p>	<p>Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems</p> <p>Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects</p> <p>Reduce noise, where possible, and maintain the environmental acoustic quality where it is good</p>	<p>align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.</p>



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