



DESIGNING AND DELIVERING
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KILKENNY COUNTY COUNCIL LOCAL AUTHORITY BIODIVERSITY ACTION PLAN 2025-2030

Appropriate Assessment Screening Report

Prepared for:

Kilkenny County Council



Kilkenny County Council
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Date: November 2024

Document No:

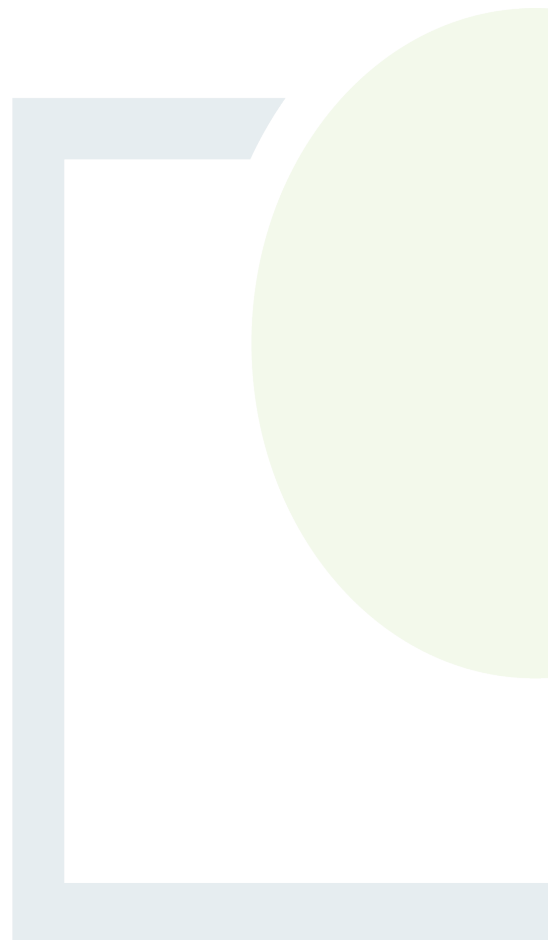
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Local Authority Biodiversity Action Plan AA Screening Report for Kilkenny County Council

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

User is responsible for Checking the Revision Status of This Document

Rev. No.	Description of Changes	Prepared by:	Checked by:	Approved by:	Date:
0	Draft	EDK/KB	RD	JK	19/11/2024

Client: Kilkenny County Council

Keywords: Appropriate Assessment, AA, Screening, Article 6(3) of the Habitats Directive, European (Natura 2000) sites, LABAP, Biodiversity

Abstract: Fehily Timoney and Company is pleased to submit this AA Screening Report to Kilkenny County Council for their Local Authority Biodiversity Action Plan.

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1. INTRODUCTION

1.1 Introduction

Fehily Timoney and Company (FT) was commissioned by Kilkenny County Council to prepare an Appropriate Assessment Screening Report for their Local Authority Biodiversity Action Plan (LABAP) for the years 2025-2030. The aim of the LABAP is to promote biodiversity conservation at local authority level.

This report presents an examination of whether the LABAP is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is based on best available scientific knowledge. This report has been prepared to inform the competent authority in completing their statutory obligations in relation to Appropriate Assessment, as required by Article 6(3) under Council Directive 92/43/EEC (Habitats Directive).

1.2 Background to Biodiversity Action Plans

LABAPs must be prepared in accordance with The Heritage Council's Local Authority Biodiversity Action Plan Guidelines (2024). These guidelines provide best practice guidance to local authorities on preparing and implementing biodiversity conservation actions within their functional area. These guidelines advise that LABAPs 'should aim to record, conserve, restore and promote biodiversity, and to increase awareness, understanding and appreciation of it among the people of the area.'

LABAPs are designed to provide a structured approach to biodiversity conservation at local level. Local authorities are required to develop a compelling vision for their LABAP and a set of clear, measurable and achievable objectives for biodiversity conservation in their functional area. LABAPs are developed by local authority Biodiversity Officers with the support of a dedicated Biodiversity Working Group. Public engagement and consultation must be undertaken at the Pre-draft and Draft Plan stages of the Plan-making process. All submissions from stakeholders and members of the public should be considered during the development of a LABAP.

LABAPs should serve to define targeted and focused action for promoting biodiversity conservation through the functions of a local authority in alignment with nature legislation and higher order policy such as the 4th National Biodiversity Action Plan and inter-related policy. LABAPs should be in harmony with and support the land use planning framework, including City and County Development Plans and Local Area Plans.

LABAPs are non-statutory land use plans that should be screened for the need for SEA and AA.

1.3 Legislative Context

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) provides legal protection for habitats and species of European importance. The Directive requires that where a plan or project is likely to have a significant effect on a European Site, while not directly connected with or necessary to the nature conservation management of the site, it will be subject to 'Appropriate Assessment' to identify any implications for the European site in view of the site's Conservation Objectives. Specifically, Article 6(3) of the Habitats Directive states:

"6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended).

The competent authority must carry out a screening for appropriate assessment to assess, in view of best scientific knowledge, if the proposed plan, individually or in combination with another plan or project is likely to have a significant effect on the European site. If it cannot be excluded, on the basis of objective information, that the proposed plan, individually or in combination with other plans or projects, will have a significant effect on a European site, an appropriate assessment of its implications for the European Site(s) in view of the Site's conservation objectives must be carried out.

The provisions of Article 6(3) do not apply where the proposed plan or project is 'connected with or necessary to the management of the site'. In this case, the plan is not directly connected with or necessary to the management of any European site(s).

1.4 Guidance

The assessment was conducted in accordance with the following guidance:

- Fossitt, J. A. (2000). A guide to habitats in Ireland. Heritage Council/Chomhairle Oidhreachta.
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service (NPWS), Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010);
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission 2013;
- Scottish Natural Heritage. (2016). Assessing Connectivity with Special Protection Areas (SPAs) Guidance.
- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (European Commission, 2002). This document was updated by Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Commission Notice (2021) Brussels, 28.9.2021 C (2021) 6913 final;
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, Office of the Planning Regulator (2021).
- Atkinson, S., Magee, M., Moorkens, E.A. & Heavey, M. (2024). Guidance on Assessment and Construction Management in Margaritifera Catchments in Ireland. <https://e-mussels.eu/europe/conservation-guidelines>

1.5 Assessment Process and Approach

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

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

In the context of this report, a source is any identifiable element of the proposed plan that is known to interact with the receiving environment. A receptor is the Qualifying Interests (QI)¹ for an SAC or Special Conservation Interests (SCI)² for an SPA or an ecological feature that is known to be utilised by the QI/SCI. In practice, the term Qualifying Interests also applies to SCIs (and is used in this document for simplicity). A pathway is any connection or link between the source and the receptor.

The assessment commences with a description of the plan, and the associated sources for impacts to the receiving environment. The type of impacts that are likely due to the plan (Source) are identified having regard to the spatial and temporal scale of the plan, resource requirements and likely emissions. These sources are then used to define the zone of influence (ZoI) of the plan.

The European Commission Notice (2021) on the ‘Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC, states that in identifying European sites (Natural 2000 sites), which may be affected by a plan or project, the following should be identified:

- Any European sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;
- Any European sites within the likely zone of influence of the plan or project. European sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the plan project, including as regards the use of natural resources (e.g., water) and various types of waste, discharge or emissions of substances or energy;
- European sites whose connectivity or ecological continuity can be affected by the plan or project.

¹ SACs are areas designated under the Habitats Directive to conserve habitats listed in Annex I of the Directive and plant and animal species listed in Annex II. Collectively these are referred to as the ‘Qualifying Interests’ or ‘QIs’ of the SAC.

² SPAs are sites classified under the Birds Directive to protect rare or vulnerable bird species listed in Annex I to the Directive as well as regularly occurring migratory species and wetlands. Wetland habitats that support internationally important populations of migratory birds may be coastal or inland. Collectively, these species and habitats are referred to as the ‘Special Conservation Interests’ of the SPA.

The zone of influence of a plan is the geographical area over which it could affect the receiving environment in a way that could have potential effects on the Qualifying Interests of a European site. The OPR (2021) practice note states that the Zone of Influence must be established on a case-by-case basis using the Source-Pathway-Receptor (S-P-R) framework and not by arbitrary distances (such as 15 km). Section 3.3 sets out the detailed rationale for the identification of relevant European sites within the ZoI based on the sources of impacts arising from the proposed plan. Subsequently, an assessment is undertaken with respect to potential connectivity (Pathways) to European Sites and their qualifying interests/special conservation interests are identified.

The potential for in-combination impacts with other plans and projects is also assessed having regard to the identified impacts of the proposed plan along the ecological pathways identified to European sites.

The likelihood of significant effects on the European Sites within the ZoI is examined having regard to the sensitivity of each European site with pathways for impacts associated with the proposed plan on its own and in combination with other plans and projects.

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

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

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the plan will be required under law to be subjected to Appropriate Assessment.

2. DESCRIPTION OF THE LOCAL AUTHORITY BIODIVERSITY ACTION PLAN

2.1 Local Authority Biodiversity Action Plan

The overarching aim of the LABAP is to record, conserve, restore and promote biodiversity, and to increase awareness, understanding and appreciation of it among the people of the area.

The following Strategic Objectives are defined in the LABAP:

- Provide Biodiversity Leadership at Local Level
- Strengthen Local Biodiversity Policy and Integrate Biodiversity Procedures into Council Operations
- Manage Public Open Spaces for Biodiversity
- Conduct Habitat Mapping and Monitoring to Support Data-Driven Management Decisions
- Record and Monitor Protected Species
- Foster Engagement and Promotion of Best Practice Biodiversity Action

A series of Actions have been defined in the LABAP under each Strategic Objective. The higher-level Objectives are broader in scope, while the Actions underpinning the Objectives are more defined and measurable. These are presented in Table 3-1.



Table 2-1: LABAP Strategic Objectives and Actions

Objective	Action Code	Target	Action
Provide Biodiversity Leadership at Local Level	1.1	A Biodiversity Working Group established of stakeholders to champion biodiversity in Co. Kilkenny	Meet 4 times a year One joint meeting with the Heritage Forum. The Chief Executive and elected members invited to a special meeting to inform them of issues and opportunities present in Kilkenny
	1.2	A better understanding of biodiversity created across the organisation, top down, bottom-up approach.	Create specific biodiversity learning modules for staff induction, elected members, planners, engineers and outdoor staff
	1.3	Funding and opportunities for biodiversity themed projects promoted across sectors in Kilkenny	Create a directory for funding sources and promote opportunities locally
	1.4	Biodiversity reporting refined to include qualitative and quantitatively documentation of biodiversity action on council led projects	Transparently report on biodiversity actions progress Devise and activate a system to capture data on biodiversity-based complaints
	1.5	NBS best practice promoted into Council design projects.	Showcase demonstration the Council's NBS projects
	1.6	A criterion created to prioritise publicly owned sites that could be enhanced for biodiversity	Audit of Council properties to determine sites for enhancement
	1.7	Local training and education providers exploring potential of increasing biodiversity training opportunities locally	Assess opportunities with local training and education providers to support biodiversity education and boost biodiversity recording capacity.
	1.8	A biodiversity online-platform signposting locations of data resources and provide a depository for county studies	Audit resources on Kilkenny Heritage.ie Develop a strategy to improve access to biodiversity mapping and studies. Launch New Platform
	1.9	Public organisations with properties increasing actions for biodiversity enhancement	Identify potential public body projects Offer support and advice to ensure successful delivery.



Objective	Action Code	Target	Action
Strengthen Local Biodiversity Policy and Integrate Biodiversity Procedures into Council Operations	2.1	Expedite the reduction of glyphosate-based chemicals by Kilkenny County Council	Calculate usage annually Determine reduction pathway
	2.2	Establish an overview of the presence of Alien Invasive Species on public land	Co-ordinate an internal mapping function to identify and manage sites of concern
	2.3	Build training capacity and awareness for hedgerow maintenance and retention.	Implement training Provide guidance to landowners on retention, translocation methods and cutting maintenance
	2.4	Ecological research informing planning policies to retain and restore ecological corridors and pathway to protect locally important habitats and species.	Draft policies based on advancing ecological surveys and studies to inform future planning and development.
	2.5	Audit sensitive species and habitats before Council bridge maintenance projects	Identify and capture biodiversity opportunities during bridge maintenance works with appropriate stakeholders.
Manage Public Open Spaces for Biodiversity	3.1	Enhancement of green and blue corridors connectivity including the protection of riparian vegetation, instream connectivity and habitat networks	Determine a procedure to prioritise the blue/green corridors for mapping the connectivity of public green and blue corridors Identify gaps and restore ecological connectivity. Map pollinator foraging network in urban areas.
	3.2	Pollinator-friendly mowing practices formalised	Map areas of semi natural grasslands on public grounds Increase % of short flowering meadows by completing pilot trials and expand where suitable. Complete an audit of % land in public meadow.
	3.3	Protection of Urban Trees in Kilkenny City	Develop a tree strategy to include a baseline of tree canopy cover, identify species diversity and tree health.
	3.4	Adoption of dark sky biodiversity friendly lighting policy for public spaces whilst maintaining standards for safety and security concerns	Integrate dark sky protocols into Council developments. Audit Council properties to determine if artificial light reduction is possible



Objective	Action Code	Target	Action
	3.5	Public parks and amenity trails management plans in operation	Audit number of parks and amenity trails Complete a management plan for each
Conduct Habitat Mapping and Monitoring to Support Data-Driven Management Decisions	4.1	Non-designated sites of local biodiversity importance that currently has no statutory protection identified and local protection sought	Identification completed by research and field studies Develop a mechanism for sites to be considered for local protection under the County Development Plan
	4.2	Community Biodiversity Action Plans influencing communities' vision when consulting on local area plans, and village renewal proposals to retain ecological connectivity	Promote the development of Community Biodiversity Action Plan that include habitat mapping of urban areas
	4.3	A visual storyboard to present biodiversity hotspots in the county to highlight project opportunities	Create a county storyboard that identifies all the statutory protected sites, ancient woodlands and known biodiversity hotspots and include biodiversity projects to inform and track biodiversity rich sites and biodiversity projects
	4.4	Protection of wetland sites	Review the County Kilkenny Wetland Survey and prioritise recommended actions
	4.5	Protection of Hedgerows	Complete audit of Kilkenny hedgerows and prioritise future projects on enhancing ecological connectivity between biodiversity rich sites
	4.6	Protection of Ancient Woodlands	Identify, map and determine a pathway to secure the conservation and restoration of Kilkenny's Ancient Woodland habitat
	4.7	Water quality data easy to source and understand	Farm inspection team to collaborate with agricultural sector, Nore Vision, IFI, Teagasc and LAWPRO to complete water quality assessments and communicate issues impacting water quality and promote actions to improve water quality
	4.8	Water quality data easy to source and understand	Promote annual data from the EPA RMCEI Plan that illustrates the work completed by the Environment Section Communicate the findings of the EPA Annual Water Quality Reports to raise awareness of water quality issues.



Objective	Action Code	Target	Action
Record and Monitor Protected Species	5.1	Strong synergies existing between Kilkeny County Council and the National Biodiversity Data Centre and other NGO's	Promote national monitoring schemes locally to encourage participation.
	5.2	Students have strong interest in biodiversity and species recording	Promote the Heritage Council's "Heritage in Schools Programme" Support biodiversity programs under Kilkeny County Council's Green School Programme. Promote/develop school supports to engage students in species identification
	5.3	Strong citizen science participation rate in Kilkeny	Support and promote local NGOs such as the Kilkeny Naturalist Field Club and Kilkeny Birdwatch Ireland Branch
	5.4	Annex II and IV species of the Habitats Directive presence and distribution documented	Kilkeny County Council to commission surveys
Foster Engagement and Promotion of Best Practice Biodiversity Action	6.1	Kilkeny Citizens Informed about biodiversity	Assist in the dissemination of Biodiversity promotional material, promoting funding streams, training opportunities, field days and workshops Build a portfolio of talks, workshops Promote Biodiversity Week (May) and Heritage Week (August) annually
	6.2	Leverage creative, cultural and artistic initiatives to enhance engagement on biodiversity issues	Encourage and support artists whose work promotes ecological awareness and biodiversity and enables individuals to connect with nature
	6.3	Pollinator Friendly Actions Widespread throughout communities	Support local initiatives that engage the public using the sectoral themed resources from the All-Ireland Pollinator Plan.
	6.4	Agricultural biodiversity enhancement projects widespread	Promote field days, demonstration walks, workshops and field days that educate farmers on biodiversity practices. Distribute biodiversity farm packs as part of the Council's Farm Survey visits. Collaborate with LAWPRO to highlight the uptake, successes and outcomes of their EIP programme



Objective	Action Code	Target	Action
	6.5	Private landholdings biodiversity enhancement projects widespread	Support and promote demonstration events that lead to a better understanding of options for landowners to increase the biodiversity value of landholdings.
	6.6	Community tree nurseries promoting local provenance widespread	Determine the methodology for set up Identify interested parties Identify training requirements Identify possible funding avenues
	6.7	Wide appreciation of soil health, and benefits known of home compost and leaf mould	Promote soil science Promote compost free gardening, Promote leaf mould as an alternative source to compost
	6.8	A greater understanding of actions the general public can take to take to assist biodiversity	Complete awareness campaigns highlighting how households can lower nutrient loading in river catchments e.g Greener Cleaning, Septic Tank Maintenance.
	6.9	Water conservation widespread across all sectors	Promote water conservation across sectors, providing the linkage to importance to biodiversity protection. Promote rain water harvesting across different sectors

2.2 Relationship with other relevant Plans and Programmes

The LABAP sits within a hierarchy of plans and has been informed by and is consistent with the aims and objectives of other plans, programmes and strategies developed at national, regional and local levels. These include, but are not limited to, the following:

National Level

- Project Ireland 2040: National Planning Framework (2018).
- Heritage Ireland 2030: A Framework for Heritage (2022).
- Heritage Council Strategic Plan 2023-2028 (2023).
- The 4th National Biodiversity Plan 2023 - 2030 (2024) (discussed further in Section 2.1.1 below).
- Climate Action Plan (2024).

Regional and Local Level

- Regional Spatial and Economic Strategy for the region.
- The County Development Plan for the local authority functional area.
- The Local Authority Climate Action Plan for the local authority functional area.
- The Heritage Plan for the local authority functional area.

2.2.1 The 4th National Biodiversity Action Plan 2023-2030

Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to protect and value nature. The aim is to ensure that every citizen, community, business, local authority, semi-state and state agency has an awareness of biodiversity and its importance, and of the implications of its loss, while also understanding how they can act to address the biodiversity emergency as part of a renewed national effort to 'act for nature.' This plan provides the overarching arching framework for delivering biodiversity conservation through LABAPs.

This National Biodiversity Action Plan 2023-2030 builds upon the achievements of the previous Plan. The five overarching objectives to address new and emerging issues include the following:

- Objective 1 - Adopt a Whole of Government, Whole of Society Approach to Biodiversity
- Objective 2 - Meet Urgent Conservation and Restoration Needs
- Objective 3 - Secure Nature's Contribution to People
- Objective 4 - Enhance the Evidence Base for Action on Biodiversity
- Objective 5 - Strengthen Ireland's Contribution to International Biodiversity Initiatives

The NBAP contains actions pertaining to the preparation to LABAPs under *Objective One: Adopt a Whole-of-Government, Whole-of-Society Approach to Biodiversity* and *Objective Three: Secure Nature's Contribution to People*, including the following:

Table 2-2: NBAP Actions pertaining to the preparation to Local Biodiversity Plans

Action Number	Action
1C5	The Heritage Council will publish updated guidelines for the production of Local Biodiversity Action Plans and their integration with City and County Development Plans
1C6	All Local Authorities will have a Biodiversity Action Plan adopted by the end of 2026 which is subject to regular review and revision processes in line with relevant guideline standards
3A3	Local Authorities will work to identify and respond to opportunities for enhancing the biocultural value of GBUE through appropriate design strategies, the use of visual and performing arts, and enhancing equity of access and promoting use of GBUE by community groups, and integrating cultural services in local biodiversity action plans

Local Authorities are expected to align their LABAPs with national commitments defined in the NBAP to ensure a cohesive approach to biodiversity conservation across the country.

3. SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Introduction to Screening

This section of the report examines if the plan is likely to have a significant effect upon European Sites, either alone or in combination with other projects or plans. The screening phase is progressed in the following stages. A series of questions are asked during the Screening Stage of the AA process in order to determine:

- Whether the plan or project introduces any sources of environmental or ecological impact
- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European Site.
- Whether the plan or project will have a likely significant effect on a European Site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential effects.

Plans are screened out based on one or a combination of the following criteria:

- Where it can be shown that there are no sources of environmental impact associated with the plan.
- Where there are no pathways such as hydrological links between the plan area, and relevant European sites
- Where a European site is located at a distance from the plan area such that effects are not foreseen;
- Where known threats or vulnerabilities at a European site cannot be linked to potential effects that may arise from the plan.

3.2 Potential Interactions of the Proposed Plan on the receiving environment

Having regard to the European Commission (2021) guidance document and the OPR (2021) practice note, the potential impacts of the LABAP actions on the receiving environment at source are considered based (in Table 3.1) on the following criteria:

- Habitat destruction/fragmentation/deterioration;
- Surface water run-off carrying suspended silt and contaminants, into local watercourses;
- Changes to groundwater quality, yield and/or flow paths associated with the proposed project;
- Plan related activities (noise, vibration, lighting, human presence, structures, etc) leading to disturbance / displacement of species;
- Plan related activities leading to a reduction in species populations / density;
- Air pollution due to dust and other airborne emissions; and
- Disturbance and potential spread of invasive species

These impacts are further examined in defining the Zone of Influence (ZoI) of the plan to identify likely significant effects through the Source-Pathway-Receptor assessment (Section 3.3).



Table 3-1: Identification of sources arising from the proposed plan that have potential for interactions with the receiving environment

Objective	Action Code	Target	Action	Potential Sources of Impact
Provide Biodiversity Leadership at Local Level	1.1	A Biodiversity Working Group established of stakeholders to champion biodiversity in Co. Kilkenny	Meet 4 times a year One joint meeting with the Heritage Forum. The Chief Executive and elected members invited to a special meeting to inform them of issues and opportunities present in Kilkenny	This action pertains to the establishment of a Biodiversity Working Group of stakeholders to champion biodiversity in Co. Kilkenny. This action will create and foster a collaborative approach to implementing biodiversity initiatives and improving biodiversity in county Kilkenny. It will help ensure the integration of biodiversity consideration and improvements in all areas in which the council provides services and will contribute to the effective delivery of the plan and biodiversity improvements generally. This action will not generate a source of negative impact on the receiving environment.
	1.2	A better understanding of biodiversity created across the organisation, top down, bottom-up approach.	Create specific biodiversity learning modules for staff induction, elected members, planners, engineers and outdoor staff	This action promotes biodiversity related training with an aim to improve understanding of biodiversity across the organisation. It has the potential to improve biodiversity related expertise and underpin and support biodiversity improvements within Kilkenny. This action will not generate a source of negative impact on the receiving environment.
	1.3	Funding and opportunities for biodiversity themed projects promoted across sectors in Kilkenny	Create a directory for funding sources and promote opportunities locally	This action is aimed at protecting and enhancing biodiversity by promoting and providing funding for biodiversity themed projects across sectors in Kilkenny . It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.



Objective	Action Code	Target	Action	Potential Sources of Impact
	1.4	Biodiversity reporting refined to include qualitative and quantitatively documentation of biodiversity action on council led projects	Transparently report on biodiversity actions progress Devise and activate a system to capture data on biodiversity-based complaints	This action relates to more transparent biodiversity reporting in Kilkenny that has increased qualitative and quantitative documentation. It will underpin and support effective implementation of plan and potentially lead to more focused and targeted biodiversity improvements. This action will not generate a source of negative impact on the receiving environment.
	1.5	NBS best practice promoted into Council design projects.	Showcase demonstration the Council's NBS projects	This action will help to increase the integration of Nature Based Solutions (NBS) practices in projects by raising awareness on projects within the council that use this NBS approach. It has the potential to foster further interest in biodiversity protection and enhancement throughout the local authority as an organisation. This action will not generate a source of negative impact on the receiving environment.
	1.6	A criterion created to prioritise publicly owned sites that could be enhanced for biodiversity	Audit of Council properties to determine sites for enhancement	This action is aimed at protecting and enhancing biodiversity in Kilkenny by identifying council land which can be enhanced for biodiversity. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.
	1.7	Local training and education providers exploring potential of increasing biodiversity training opportunities locally	Assess opportunities with local training and education providers to support biodiversity education and boost biodiversity recording capacity.	This action promotes biodiversity related training and education opportunities locally. It has the potential to improve biodiversity related expertise and underpin and support biodiversity improvements within Kilkenny. It has the potential to foster further interest in biodiversity protection and enhancement in the community. This action will not generate a source of negative impact on the receiving environment.



Objective	Action Code	Target	Action	Potential Sources of Impact
	1.8	A biodiversity online-platform signposting locations of data resources and provide a depository for county studies	Audit resources on Kilkeny Heritage.ie Develop a strategy to improve access to biodiversity mapping and studies. Launch New Platform	This action promotes biodiversity related data and resource access through the provision of an online biodiversity platform. It has the potential to improve biodiversity related knowledge and expertise and underpin and support biodiversity improvements within Kilkeny. This action will not generate a source of negative impact on the receiving environment.
	1.9	Public organisations with properties increasing actions for biodiversity enhancement	Identify potential public body projects Offer support and advice to ensure successful delivery.	This action is aimed at protecting and enhancing biodiversity in Kilkeny by identifying public body projects where increased biodiversity enhancement can be facilitated. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.
Strengthen Local Biodiversity Policy and Integrate Biodiversity Procedures into Council Operations	2.1	Expedite the reduction of glyphosate-based chemicals by Kilkeny County Council	Calculate usage annually Determine reduction pathway	This action supports the prevention and reduction of glyphosate-based chemicals used by Kilkeny County Council that may affect biodiversity components in the county. It is inherently positive in nature. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.
	2.2	Establish an overview of the presence of Alien Invasive Species on public land	Co-ordinate an internal mapping function to identify and manage sites of concern	This action will prevent and minimise the spread of invasive species in Kilkeny by enhancing understanding on the current state of invasives on public land. This action has the potential to have positive effects for biodiversity, such as native species and habitats, that are at risk due to invasive species spread. It does not have the potential to generate a source of negative impacts on the receiving environment.



Objective	Action Code	Target	Action	Potential Sources of Impact
	2.3	Build training capacity and awareness for hedgerow maintenance and retention.	Implement training Provide guidance to landowners on retention, translocation methods and cutting maintenance	This action supports the protection and enhancement of hedgerows in Kilkenny through the provision of training and education on hedgerow maintenance. Hedgerows are an integral biodiversity feature and act as important habitat and ecological corridors. This action has the potential to have positive effects for biodiversity, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.
	2.4	Ecological research informing planning policies to retain and restore ecological corridors and pathway to protect locally important habitats and species.	Draft policies based on advancing ecological surveys and studies to inform future planning and development.	This action proposes the implementation of policies to advance the carrying out of ecological surveying and studies to gain better knowledge on ecological corridors and pathways in the county. It will underpin and support effective implementation of the plan and potentially lead to more focused and targeted biodiversity improvements. It does not have the potential to generate a source of negative impacts on the receiving environment.
	2.5	Audit sensitive species and habitats before Council bridge maintenance projects	Identify and capture biodiversity opportunities during bridge maintenance works with appropriate stakeholders.	This action supports the integration of biodiversity consideration and improvements within council bridge maintenance projects. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment, outside of what has already been considered and mitigated under land use planning framework SEA and AA processes.



Objective	Action Code	Target	Action	Potential Sources of Impact
Manage Public Open Spaces for Biodiversity	3.1	Enhancement of green and blue corridors connectivity including the protection of riparian vegetation, instream connectivity and habitat networks	Determine a procedure to prioritise the blue/green corridors for mapping the connectivity of public green and blue corridors Identify gaps and restore ecological connectivity. Map pollinator foraging network in urban areas.	This action is aimed at protecting and enhancing biodiversity in Kilkenny through better understanding and improvement of green and blue corridors. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. The improvement and enhancement of these green and blue corridors does not have the potential to generate a source of negative impacts on the receiving environment, outside of what has already been considered and mitigated under land use planning framework SEA and AA processes.
	3.2	Pollinator-friendly mowing practices formalised	Map areas of semi natural grasslands on public grounds Increase % of short flowering meadows by completing pilot trials and expand where suitable. Complete an audit of % land in public meadow.	This action will support the conservation of pollinators, a key species, present in Kilkenny and connected areas. The actions aim at establishing more pollinator-friendly mowing practices. It has the potential to generate a positive effects for this key species and for biodiversity generally. It does not have the potential to generate a source of negative impacts on the receiving environment.
	3.3	Protection of Urban Trees in Kilkenny City	Develop a tree strategy to include a baseline of tree canopy cover, identify species diversity and tree health.	This action supports the protection and enhancement of Urban trees in Kilkenny City by developing a tree strategy. Urban trees are an integral biodiversity feature and act as important habitat and ecological corridors. This action has the potential to have positive effects for biodiversity, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.



Objective	Action Code	Target	Action	Potential Sources of Impact
	3.4	Adoption of dark sky biodiversity friendly lighting policy for public spaces whilst maintaining standards for safety and security concerns	Integrate dark sky protocols into Council developments. Audit Council properties to determine if artificial light reduction is possible	This action supports the control and management of lighting in Kilkenny by adopting a dark sky biodiversity friendly lighting policy for public spaces. It will contribute to preventing and reducing the impact of lighting on light sensitive species, such as bat species. This action has the potential to have positive effects for biodiversity. It does not have the potential to generate a source of negative impacts on the receiving environment.
	3.5	Public parks and amenity trails management plans in operation	Audit number of parks and amenity trails Complete a management plan for each	This action is aimed at quantifying the number of public parks and amenity trails within Kilkenny and establishing ecological management plans for these areas. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. This is a result of more effective and focused management that can lead to more targeted biodiversity improvements. It does not have the potential to generate a source of negative impacts on the receiving environment.
Conduct Habitat Mapping and Monitoring to Support Data-Driven Management Decisions	4.1	Non-designated sites of local biodiversity importance that currently has no statutory protection identified and local protection sought	Identification completed by research and field studies Develop a mechanism for sites to be considered for local protection under the County Development Plan	This action proposes the identification and protection of non-designated sites of local biodiversity importance that currently has no statutory protection identified. This will underpin and support effective implementation of the plan and potentially lead to more focused and targeted biodiversity improvements. This action will not generate a source of negative impact on the receiving environment.
	4.2	Community Biodiversity Action Plans influencing communities' vision when consulting on local area plans, and village renewal proposals	Promote the development of Community Biodiversity Action Plan that include habitat mapping of urban areas	This action will create and foster a collaborative approach to implementing biodiversity initiatives and improving biodiversity in Kilkenny through the development of Community Biodiversity Action Plans. It will contribute to the effective delivery of the plan and biodiversity improvements generally. .



Objective	Action Code	Target	Action	Potential Sources of Impact
		to retain ecological connectivity		It has the potential to foster further interest in biodiversity protection and enhancement throughout the wider community. This action will not generate a source of negative impact on the receiving environment.
	4.3	A visual storyboard to present biodiversity hotspots in the county to highlight project opportunities	Create a county storyboard that identifies all the statutory protected sites, ancient woodlands and known biodiversity hotspots and include biodiversity projects to inform and track biodiversity rich sites and biodiversity projects	This action proposes creation of a county storyboard that highlights the biodiversity hotspots in Kilkeny. This will aid in the identification of areas where there are opportunities for biodiversity enhancement projects. It will underpin and support effective implementation of the plan and potentially lead to more focused and targeted biodiversity improvements. This action will not generate a source of negative impact on the receiving environment.
	4.4	Protection of wetland sites	Review the County Kilkeny Wetland Survey and prioritise recommended actions	This action supports the protection of wetland sites within Kilkeny. Wetlands are an integral biodiversity feature and provide a variety of ecosystem services. This action has the potential to have positive effects for biodiversity, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.
	4.5	Protection of Hedgerows	Complete audit of Kilkeny hedgerows and prioritise future projects on enhancing ecological connectivity between biodiversity rich sites	This action supports the protection and enhancement of hedgerows in Kilkeny. Hedgerows are an integral biodiversity feature in the plan area and act as important habitat and ecological corridors. This action has the potential to have positive effects for biodiversity, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.



Objective	Action Code	Target	Action	Potential Sources of Impact
	4.6	Protection of Ancient Woodlands	Identify, map and determine a pathway to secure the conservation and restoration of Kilkenny's Ancient Woodland habitat	This action supports the protection and enhancement of Kilkenny's Ancient Woodlands. Ancient woodlands are an integral biodiversity feature with complex ecological interactions and act as important habitat and ecological corridors. This action has the potential to have positive effects for biodiversity, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.
	4.7	Water quality data easy to source and understand	Farm inspection team to collaborate with agricultural sector, Nore Vision, IFI, Teagasc and LAWPRO to complete water quality assessments and communicate issues impacting water quality and promote actions to improve water quality	This action will create and foster a collaborative approach to attaining water quality data within Kilkenny. This will help in the understanding and communication of issues impacting water quality and promote actions to improve water quality. Thus will contribute to the effective delivery of the plan and biodiversity improvements generally. This action will not generate a source of negative impact on the receiving environment.
	4.8	Water quality data easy to source and understand	Promote annual data from the EPA RMCEI Plan that illustrates the work completed by the Environment Section Communicate the findings of the EPA Annual Water Quality Reports to raise awareness of water quality issues.	This action facilitates the increased awareness of water quality issues through the promotion of water quality data collected within Kilkenny by the EPA. This will help in the understanding of issues impacting water quality and promote actions to improve water quality. Thus will contribute to the effective delivery of the plan and biodiversity improvements generally. This action will not generate a source of negative impact on the receiving environment.
Record and Monitor Protected Species	5.1	Strong synergies existing between Kilkenny County Council and the National Biodiversity Data Centre and other NGO's	Promote national monitoring schemes locally to encourage participation.	This action aims to create and foster a collaborative approach between Kilkenny County Council and the National Biodiversity Data Centre and other NGO's to encourage local participation in national monitoring schemes.



Objective	Action Code	Target	Action	Potential Sources of Impact
				It will contribute to the effective delivery of the plan and biodiversity improvements generally. This action will not generate a source of negative impact on the receiving environment.
	5.2	Students have strong interest in biodiversity and species recording	Promote the Heritage Council's "Heritage in Schools Programme" Support biodiversity programs under Kilkenny County Council's Green School Programme. Promote/develop school supports to engage students in species identification	This action promotes biodiversity related education in students through various nature-focused programmes. It has the potential to foster further interest in biodiversity protection and enhancement in students within the wider community. This action will not generate a source of negative impact on the receiving environment.
	5.3	Strong citizen science participation rate in Kilkenny	Support and promote local NGOs such as the Kilkenny Naturalist Field Club and Kilkenny Birdwatch Ireland Branch	This action promotes increased participation in citizen science projects within Kilkenny. It has the potential to foster further interest in biodiversity protection and enhancement in the community. This action will not generate a source of negative impact on the receiving environment.
	5.4	Annex II and IV species of the Habitats Directive presence and distribution documented	Kilkenny County Council to commission surveys	This action will support the conservation of a key Annex II and IV Habitats Directive species present in Kilkenny and connected areas by documenting their distribution and presence through surveys. It will underpin and support effective implementation of the plan and potentially lead to more focused and targeted biodiversity improvements. It has the potential to generate a positive effects for this key species and for biodiversity generally. This action will not generate a source of negative impact on the receiving environment.



Objective	Action Code	Target	Action	Potential Sources of Impact
Foster Engagement and Promotion of Best Practice Biodiversity Action	6.1	Kilkenny Citizens Informed about biodiversity	Assist in the dissemination of Biodiversity promotional material, promoting funding streams, training opportunities, field days and workshops Build a portfolio of talks, workshops Promote Biodiversity Week (May) and Heritage Week (August) annually	This action will aid awareness of biodiversity and biodiversity related initiatives among citizens by increasing awareness of the biodiversity-related resources and activities available. It has the potential to foster further interest in biodiversity protection and enhancement throughout the wider community. This action will not generate a source of negative impact on the receiving environment.
	6.2	Leverage creative, cultural and artistic initiatives to enhance engagement on biodiversity issues	Encourage and support artists whose work promotes ecological awareness and biodiversity and enables individuals to connect with nature	This action will create and foster a collaborative approach to improving biodiversity in Kilkenny by leveraging creative, cultural and artistic initiatives to promote ecological awareness. It has the potential to foster further interest in biodiversity protection and enhancement amongst citizens. This action will not generate a source of negative impact on the receiving environment.
	6.3	Pollinator Friendly Actions Widespread throughout communities	Support local initiatives that engage the public using the sectoral themed resources from the All-Ireland Pollinator Plan.	This action will create and foster a collaborative approach to supporting the conservation of key pollinator species present in Kilkenny and connected areas by supporting local initiatives that engage the public on aspects of the All-Ireland Pollinator Plan. It has the potential to foster further interest in biodiversity protection and enhancement amongst citizens. It does not have the potential to generate a source of negative impacts on the receiving environment.
	6.4	Agricultural biodiversity enhancement projects widespread	Promote field days, demonstration walks, workshops and field days that educate farmers on biodiversity practices. Distribute biodiversity farm packs as part of the Council's Farm Survey visits.	This action will create and foster a collaborative approach to improving biodiversity in Kilkenny by engaging with farmers on ways in which they can enhance biodiversity within the agricultural sector. It has the potential to improve biodiversity related expertise among farmers and underpin and support biodiversity improvements on agricultural land.



Objective	Action Code	Target	Action	Potential Sources of Impact
			Collaborate with LAWPRO to highlight the uptake, successes and outcomes of their EIP programme	This action will not generate a source of negative impact on the receiving environment.
	6.5	Private landholdings biodiversity enhancement projects widespread	Support and promote demonstration events that lead to a better understanding of options for landowners to increase the biodiversity value of landholdings.	This action will promote awareness among landowners in Kilkenny on private landholdings biodiversity enhancement actions. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. This action will not generate a source of negative impact on the receiving environment.
	6.6	Community tree nurseries promoting local provenance widespread	Determine the methodology for set up Identify interested parties Identify training requirements Identify possible funding avenues	This action utilizes collaboration with community tree nurseries to promote the use of native species in Kilkenny. The promotion of native species of local provenance has the potential contribute to ecological diversity and sustainability. This action has the potential to have positive effects for biodiversity, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.
	6.7	Wide appreciation of soil health, and benefits known of home compost and leaf mould	Promote soil science Promote compost free gardening, Promote leaf mould as an alternative source to compost	This action will promote a wider appreciation of soil health, and benefits known of home compost and leaf mould. It has the potential to foster further interest in soil science and health within the community which has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.



Objective	Action Code	Target	Action	Potential Sources of Impact
	6.8	A greater understanding of actions the general public can take to take to assist biodiversity	Complete awareness campaigns highlighting how households can lower nutrient loading in river catchments e.g Greener Cleaning, Septic Tank Maintenance.	This action will create and foster a collaborative approach to implementing biodiversity initiatives and improving biodiversity in Kilkenny. It aims to educated home owners on ways in which they can lower nutrient loading in river catchments. This will lead to improved river quality which will contribute to the effective delivery of the plan and biodiversity improvements generally. This action will not generate a source of negative impact on the receiving environment.
	6.9	Water conservation widespread across all sectors	<p>Promote water conservation across sectors, providing the linkage to importance to biodiversity protection.</p> <p>Promote rain water harvesting across different sectors</p>	This action is aimed at protecting and enhancing biodiversity in Kilkenny through improved water conservation. It has the potential to generate positive effects on biodiversity components, such as habitats and key species, as well as co-benefits for other environmental components. It does not have the potential to generate a source of negative impacts on the receiving environment.

3.2.1 Summary of the interactions of the Proposed Plan on the receiving environment

The LABAP provides a general framework for biodiversity protection and enhancement on lands in the plan area. It defines the biodiversity actions that support and promote:

- Best practice biodiversity management and improvement,
- Local authority biodiversity protection and enhancement initiatives,
- The improvement of biodiversity on local authority controlled lands,
- Biodiversity training and awareness events,
- Biodiversity education and training,
- Planting of native species (i.e. trees, shrubs, plants etc.)
- Ecological surveying and mapping to identify areas of risk from threats and pressure and areas for targeted biodiversity protection/enhancement action,
- Collaborating with key stakeholders and the public to achieve biodiversity aims.

The range of actions defined in the LABAP have the potential to have a range of positive environmental effects on biodiversity, including habitats, key species, designated sites and locally important non-designated sites.

All actions in the LABAP are aimed at protecting and enhancing biodiversity. They have been carefully reviewed and it has been concluded that these actions do not have the potential to have unintended negative effects on the receiving environment.

The actions in the LABAP do not support intensive land use or development projects sitting outside the land use planning framework that can cause significant negative environmental effects. The LABAP will not in and of itself set the context for future development consent. There is no real likelihood of significant negative environmental effects occurring as result of the implementation of the LABAP.

The implementation of the LABAP will not introduce any sources of negative environmental impact, such as

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

The LABAP will not introduce any source of negative environmental impact which could result in or contribute to the following types of negative effect on a European site:

- Reduction of habitat area, habitat degradation or fragmentation;
- Disturbance to species, reduction in species populations and density;
- Changes in ecological functions and/or features that are essential for the ecological requirements of habitats and species (e.g. water quality and quantity);
- Interference with the key relationships that define the structure and function of the site.

The implementation of the LABAP will not result in any source of negative environmental impacts that may combine with effects occurring due to other plans or projects to create an 'in-combination' significant effect on a European site.

It is clear the LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.

3.3 European Sites within the Zone of Influence (Zoi)

The OPR (2021) AA Screening practice note states that the Zone of Influence must be established on a case-by-case basis using the Source-Pathway-Receptor model. The S-P-R model has been used to identify the Zoi to ensure that relevant European sites are identified. The S-P-R model minimises the risk of overlooking distant or obscure effect pathways, while also avoiding an over reliance on buffer zones (e.g. 15 km), within which all European sites should be considered. This approach follows the DoEHLG (2009 rev 2010) guidance on AA which states that:

“For projects, the distance could be much less than 15 km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects”

As detailed in section 1.5, in order for an effect to occur, all three elements of this mechanism must be in place. The absence of one of the elements of the mechanism means there is no likelihood for the effect to occur. The potential impacts of the plan are set out in Section 3.2 of this report. The impact is essentially the 'source' in the S-P-R model.

These impacts may be very localised and confined to defined area with no potential connectivity to a European site and therefore no potential for effects. Alternatively, where an ecological or functional pathway exists they may give rise to a potential effect to a Qualifying Interest of a European site.

The dominant ecological pathways to consider are:

- Direct physical interactions or changes to the local environment;
- Air dispersal (noise, dust, odour emissions etc.);
- Hydrological interactions; and
- Dispersal patterns of mobile species

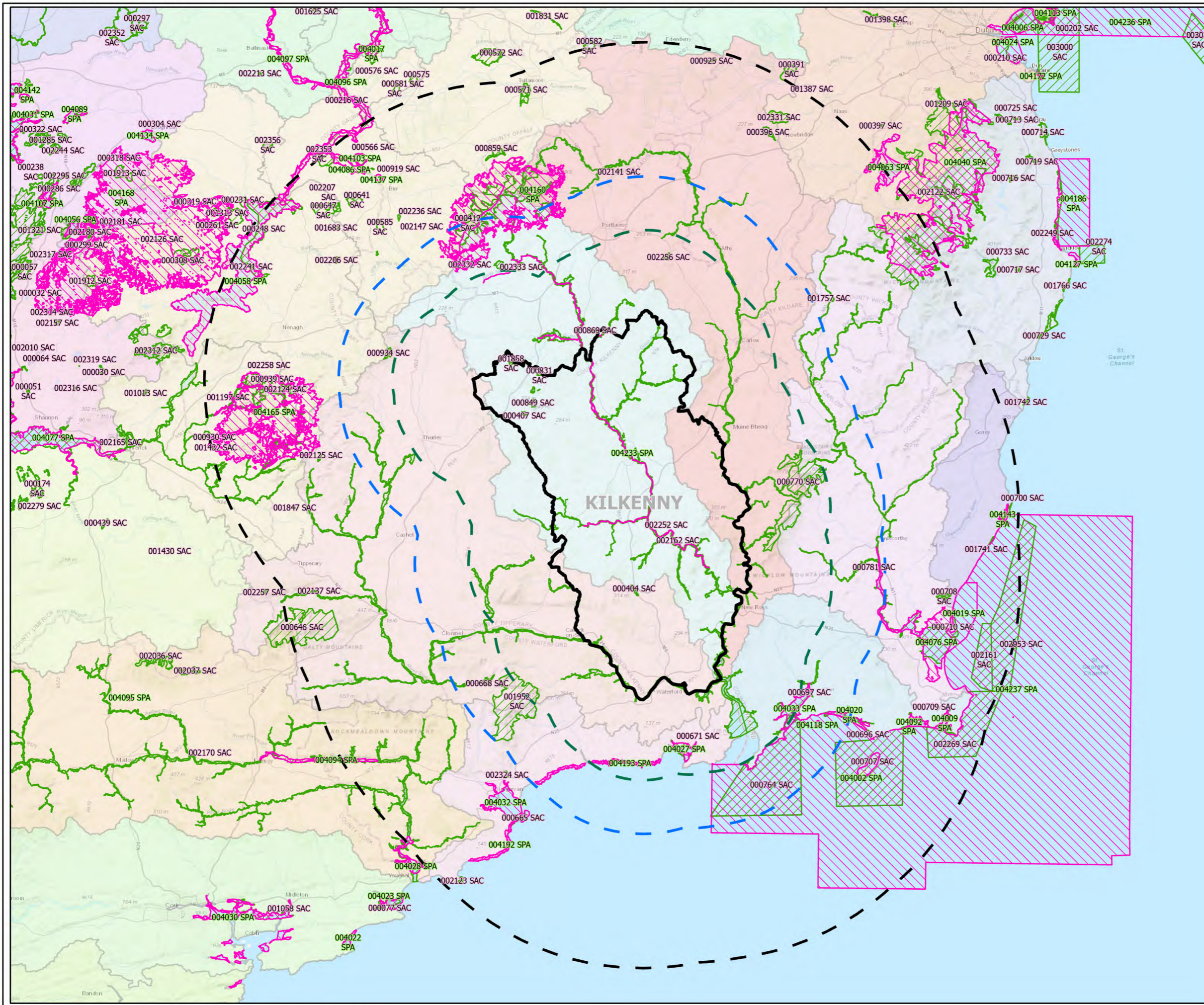
Based on the precautionary principal, the Zone of Influence of the proposed plan has been defined as:

- All European sites either solely or partially in County Kilkenny
- All hydrologically connected European Sites to waterbodies which flow through County Kilkenny; and
- All European sites within a 15km buffer of County Kilkenny

All European sites within the Zone of Influence of the Plan area or which are potentially connected to the Plan area ecologically, hydrologically or through hydrogeology have been identified - having appropriate regard to the interaction criteria defined in Section 1.5.

A map showing these European sites in or connected to the plan area is presented in Figure 3-1. Background information on these European sites is presented in Appendix 1, including:

- Quality and site characteristics of European sites considered in the assessment.
- 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.
- 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.
- Known threats and pressures related to the qualifying interests from each Special Protection Area as per article 17 reporting from the National Parks and Wildlife Services.



- Legend**
- County Boundary
 - 50km Buffer
 - 25km Buffer
 - 15km Buffer
 - Special Protection Areas
 - Special Area of Conservation

- Catchment Name**
- Ballyteigue-Bannow
 - Bandon-Ilen
 - Barrow
 - Blackwater (Munster)
 - Boyne
 - Colligan-Mahon
 - Corrib
 - Galway Bay South East
 - Lee, Cork Harbour and Youghal Bay
 - Liffey and Dublin Bay
 - Lower Shannon
 - Nore
 - Ovoca-Vartry
 - Owenavorrach
 - Shannon Estuary North
 - Shannon Estuary South
 - Slaney & Wexford Harbour
 - Suir
 - Upper Shannon

Note: A full list of European sites within, overlapping or connected to the Plan Area is provided in Screening for Appropriate Assessment section of this document.

TITLE:	European Sites with Connectivity to Co. Kilkenney
PROJECT:	Kilkenny Local Authority Biodiversity Action Plan
FIGURE NO:	3-1
CLIENT:	Kilkenny County Council
SCALE:	1:700,000
REVISION:	0
DATE:	13/11/2024
PAGE SIZE:	A3



3.4 Consideration of in-combination Effects with other plans or projects

Article 6(3) of the Habitats Directive requires that:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives”.

It is therefore required that the likely significant effects of the plan are considered in-combination with other plans or projects within the zone of influence.

The consideration of in-combination effects with other plans or projects, focused on the sources of impacts identified for the plan in Section 3.2. The principal plans that are related to the LABAP are defined in Section 2-2.

The LABAP is in harmony and consistent with all inter-related plans, including land use plans relevant to the plan area, higher order heritage related plans, the Local Authority Climate Action Plan, the national Climate Action Plan and the 4th National Biodiversity Action Plan. The range of positive effects that may be realised by the implementation of the LABCAP have the potential to interact and combine with positive effects associated with biodiversity measures defined in these inter-related plans to create larger, more significant positive effects.

All actions in the LABAP are aimed at protecting and enhancing biodiversity. The implementation of the LABAP will not give rise to likely significant negative effects on the environment that have the potential to interact and combine with negative effects associated with measures defined in these inter-related plans or projects to create larger, more significant negative effects.

The Plan does not therefore have any potential to contribute to in-combination likely significant effects on European sites that may occur due to the wider implementation of inter-related plans or projects.



3.5 Assessment of Likely Significant Effects

Table 3-2 examines whether there is potential for effects on identified European sites considering information provided above and the background information on the relevant European sites provided in Appendix 1.

Table 3-2: Identification of European Sites within the Zone of Influence of the Draft Plan

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	Likely Significant Effect / No Likely Significant Effect
000404	Hugginstown Fen SAC	0	Alkaline fens [7230]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
000407	The Loughans SAC	0	Turloughs [3180]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
000831	Cullahill Mountain SAC	0	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect



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	Likely Significant Effect / No Likely Significant Effect
000849	Spahill and Clomantagh Hill SAC	0	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
001858	Galmoy Fen SAC	0	Alkaline fens [7230]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
002137	Lower River Suir SAC	0	Freshwater pearl mussel (Margaritifera margaritifera) [1029], White-clawed crayfish (Austropotamobius pallipes) [1092], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Twaite shad (Alosa fallax) [1103], Otter (Lutra lutra) [1355], Atlantic salmon (Salmo salar) [1106], Brook lamprey (Lampetra planeri) [1096], Taxus baccata woods of the British Isles [91J0], River lamprey (Lampetra fluviatilis) [1099], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Sea lamprey (Petromyzon marinus) [1095], Mediterranean salt meadows (Juncetalia maritimi) [1410], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Old sessile oak woods with Ilex and Blechnum in	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect



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	Likely Significant Effect / No Likely Significant Effect
			the British Isles [91A0], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]				
002162	River Barrow and River Nore SAC	0	Otter (<i>Lutra lutra</i>) [1355], White-clawed crayfish (<i>Austropotamobius pallipes</i>) [1092], Killarney fern (<i>Trichomanes speciosum</i>) [1421], Reefs [1170], European dry heaths [4030], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1029], Twaite shad (<i>Alosa fallax</i>) [1103], Brook lamprey (<i>Lampetra planeri</i>) [1096], Desmoulin's whorl snail (<i>Vertigo moulinsiana</i>) [1016], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Sea lamprey (<i>Petromyzon marinus</i>) [1095], Nore Pearl Mussel (<i>Margaritifera durrovensis</i>) [1990], Estuaries [1130], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], Petrifying springs with tufa formation (Cratoneurion) [7220], Mudflats and sandflats	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect



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	Likely Significant Effect / No Likely Significant Effect
			not covered by seawater at low tide [1140], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Atlantic salmon (<i>Salmo salar</i>) [1106]				
002252	Thomastown Quarry SAC	0	Petrifying springs with tufa formation (Cratoneurion) [7220]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
004233	River Nore SPA	0	Kingfisher (<i>Alcedo atthis</i>) [A229]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
000869	Lisbigney Bog SAC	0.16	Desmoulin's whorl snail (<i>Vertigo moulinsiana</i>) [1016], Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
000770	Blackstairs Mountains SAC	3	Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010], European dry heaths [4030]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect



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	Likely Significant Effect / No Likely Significant Effect
000671	Tramore Dunes and Backstrand SAC	8.95	Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Annual vegetation of drift lines [1210], Perennial vegetation of stony banks [1220], Embryonic shifting dunes [2110]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
004027	Tramore Back Strand SPA	8.96	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Lapwing (<i>Vanellus vanellus</i>) [A142], Curlew (<i>Numenius arquata</i>) [A160], Wetland and Waterbirds [A999], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Dunlin (<i>Calidris alpina</i>) [A149]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
002256	Ballyprior Grassland SAC	10.11	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect



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	Likely Significant Effect / No Likely Significant Effect
004193	Mid-Waterford Coast SPA	11.39	Herring Gull (<i>Larus argentatus</i>) [A184], Peregrine falcon (<i>Falco peregrinus</i>) [A103], Chough (<i>Pyrrhocorax pyrrhocorax</i>) [A346], Cormorant (<i>Phalacrocorax carbo</i>) [A017]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
000697	Bannow Bay SAC	11.56	Estuaries [1130], Embryonic shifting dunes [2110], Atlantic salt meadows (<i>Glaucopuccinellietalia maritima</i>) [1330], Mudflats and sandflats not covered by seawater at low tide [1140], Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>) [1420], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Perennial vegetation of stony banks [1220], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Annual vegetation of drift lines [1210], Shifting dunes along the shoreline with <i>Ammophila arenaria</i> - white dunes [2120]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
004033	Bannow Bay SPA	12.1	Knot (<i>Calidris canutus</i>) [A143], Redshank (<i>Tringa totanus</i>) [A162], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Pintail (<i>Anas acuta</i>) [A054], Dunlin (<i>Calidris alpina</i>) [A149], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Curlew (<i>Numenius arquata</i>) [A160], Wetland and Waterbirds [A999], Light-bellied Brent Goose	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect



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	Likely Significant Effect / No Likely Significant Effect
			(<i>Branta bernicla hrota</i>) [A046], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Lapwing (<i>Vanellus vanellus</i>) [A142], Shelduck (<i>Tadorna tadorna</i>) [A048]				
001952	Comeragh Mountains SAC	12.51	Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010], Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>) [8110], Alpine and Boreal heaths [4060], Blanket bogs * if active bog [7130], European dry heaths [4030], Siliceous rocky slopes with chasmophytic vegetation [8220], Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110], Slender green feather-moss (<i>Hamatocaulis vernicosus</i>) [6216], Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260], Calcareous rocky slopes with chasmophytic vegetation [8210]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect
000781	Slaney River Valley SAC	14.35	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], Harbour seal (<i>Phoca vitulina</i>) [1365], 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], Estuaries [1130], Otter (<i>Lutra</i>	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect



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	Likely Significant Effect / No Likely Significant Effect
			lutra) [1355], Atlantic salt meadows (Glaucopuccinellietalia maritimae) [1330], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260], Freshwater pearl mussel (Margaritifera margaritifera) [1029], Twaite shad (Alosa fallax) [1103], Brook lamprey (Lampetra planeri) [1096], Mudflats and sandflats not covered by seawater at low tide [1140], Sea lamprey (Petromyzon marinus) [1095], River lamprey (Lampetra fluviatilis) [1099], Atlantic salmon (Salmo salar) [1106]				
000764	Hook Head SAC	14.89	Large shallow inlets and bays [1160], Reefs [1170], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	The LABAP will not generate any source of negative environmental impact that may result in a negative effect on any European site.	No	No	No Likely Significant Effect

4. SCREENING CONCLUSION

This report presents an examination of whether the LABAP is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is based on best available scientific knowledge. This report has been prepared to inform the competent authority in completing their statutory obligations in relation to Appropriate Assessment, as required by Article 6(3) under Council Directive 92/43/EEC (Habitats Directive).

It can be concluded beyond reasonable scientific doubt, in view of best scientific knowledge, on the basis of objective information, that the plan, individually or in combination with other plans and projects, is not likely to have a significant effect on European sites. The principal reasons for this are as follows:

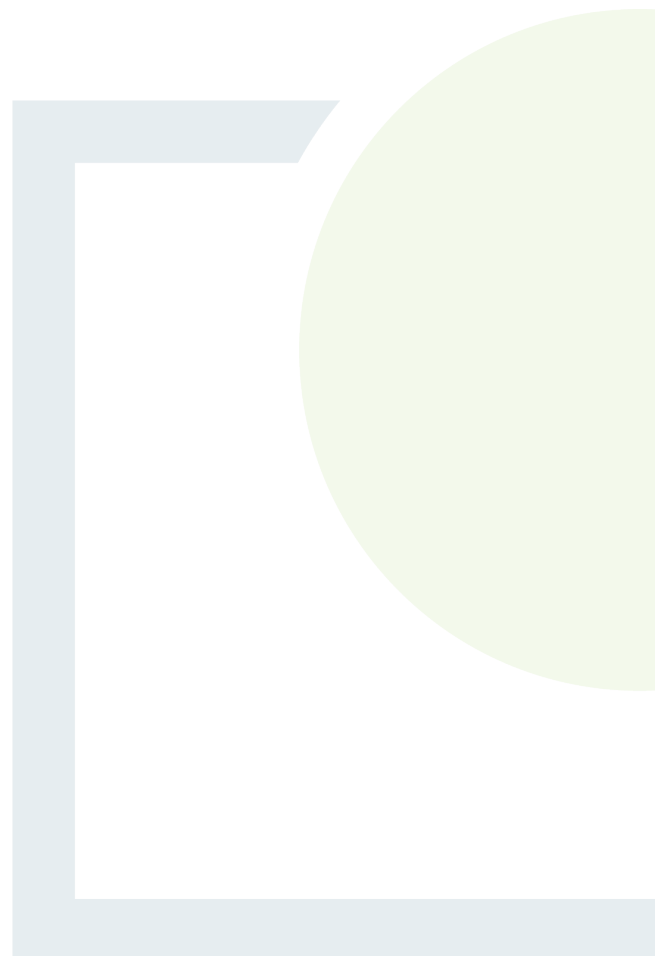
- The LABAP does not introduce any source of impacts that have potential for interactions with the receiving environment.
- All actions in the LABAP are aimed at protecting and enhancing biodiversity. There is no requirement to integrate further environmental considerations into the LABAP given its intrinsic nature, its stated aims and objectives, and the potential positive effects associated with its actions.
- The LABAP is in alignment with nature legislation and higher order policy such as the 4th National Biodiversity Action Plan and inter-related plans and programmes.
- The actions in the LABAP do not support intensive land use or development projects sitting outside the land use planning framework that can cause likely significant negative environmental effects.
- The LABAP is not a statutory land use plan. The LABAP will not in and of itself set the context for future development consent.



DESIGNING AND DELIVERING
A SUSTAINABLE FUTURE

APPENDIX 1

Background Information on
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
000781	Slaney River Valley SAC	<p>Estuaries and intertidal sand and mud flats are particularly well represented in this site with salinity ranging from full freshwater to full seawater. The quality of these habitats is generally good. The Slaney River and its tributaries display good examples of floating river vegetation. An important area of alluvial forest is found at Macmine while old oak woodlands occur at Toomnafinnoge the latter being a remnant of the ancient oak woods of Shillelagh. The site is of high importance for the conservation of fish species notably <i>Salmo salar</i> <i>Petromyzon marinus</i> <i>Lampetra fluviatilis</i> <i>L. planeri</i> and the very localised <i>Alosa fallax fallax</i>. <i>Lutra lutra</i> is well distributed throughout while a significant population of <i>Margaritifera margaritifera</i> occurs on the Derreen River. The site provides year-round haul-out habitat for the Annex II species <i>Phoca vitulina</i> and includes regionally significant breeding and moulting sites. The site has high ornithological importance especially for wintering waterfowl with internationally important populations of <i>Branta bernicla hrota</i> <i>Cygnus olor</i> <i>Limosa limosa</i> and <i>Limosa lapponica</i>. There is at least a further 14 species of wintering waterfowl which occur in numbers of national importance. Wintering <i>Larus</i> gulls are well represented especially <i>Larus ridibundus</i> and <i>Larus fuscus</i>. A nesting colony of <i>Egretta garzetta</i> has recently become established within the site and birds are present in the area throughout the year. The site supports one of the best breeding concentrations of <i>Acrocephalus scirpaesus</i> in the country. A range of flora and fauna species listed as Red Data Book species occur within the site.</p>	<p>This site comprises almost the entire Slaney system from the headwater streams in the Wicklow Mountains to the extensive estuarine area of Wexford Harbour. The main river tributaries included are the Bann Glasha Clody Derry Derreen Douglas and Carrigower Rivers. The tidal influence extends upriver as far as Enniscorthy. In the upper and central regions the geology consists of granite. Above Kilcarry Bridge the Slaney has cut a gorge into the granite plain. The Derry and Bann Rivers are bounded by a narrow line of uplands which corresponds to schist outcrops. South of Kildavin the Slaney flows through an area of Ordovician slates and grits. The river is often fringed by woodland and/or swamp vegetation. Other habitats which occur alongside the river include wet grassland scrub and in higher areas heath and bog. Improved grassland and arable land is included alongside the river for water quality reasons. Salt marshes are a feature of the lower estuarine area of the site.</p>

Site Code	Site Name	Quality of Site	Other Site Characteristics
000849	Spahill and Clomantagh Hill SAC	The importance of the site lies in the variety of natural and semi-natural grassland communities found; these are generally rare in the south midlands. The site is also important for the small population of the rare and protected species <i>Orchis morio</i> that it supports.	This site comprises three separate areas of which two are dominated by dry grassland the third by broad-leaved deciduous woodland. The site is underlain by limestone and in places shales and sandstone. Soils on the site are generally quite thin and rock outcrops are scattered throughout. A small limestone cliff is found in one area of the site. Vegetation on the site generally varies with rock type and both calcicole and calcifuge species are found.
001952	Comeragh Mountains SAC	This is the most south-easterly upland area in the country and supports a diverse range of upland habitats and species. Habitats of particular note are the oligotrophic lakes dry heaths and alpine heath. Many rare bryophytes are present including <i>Drepanocladus vernicosus</i> . Three bird species listed on Annex I of the EU Birds Directive breed within the site - <i>Falco peregrinus</i> <i>Circus cyaneus</i> and <i>Pyrhocorax pyrrhocorax</i> . The Red Data Book fish <i>Salvelinus alpinus</i> occurs in the lakes.	A medium sized upland site with a diversity of habitats including various heath types oligotrophic lakes in coombs backed by extensive cliff faces upland grassland a variety of rocky habitats and rivers with well-developed aquatic flora. The blanket bog at this site is not considered a good example of the habitat. There is a small area of coniferous forestry present within the site. Roads have been developed near Mahon River for tourism purposes.
004027	Tramore Back Strand SPA	An important estuarine site which has an internationally important population of <i>Branta bernicla hrota</i> . It supports a further six species in numbers of national importance including <i>Pluvialis apricaria</i> <i>Pluvialis squatarola</i> <i>Limosa limosa</i> and <i>Limosa lapponica</i> . The population of <i>Pluvialis squatarola</i> is of particular note as it represents 4% of the national total. <i>Egretta garzetta</i> breeds locally and the Tramore Back Strand is their main feeding area. The site provides very good feeding areas for wintering waterfowl. High tide roosting sites however are limited. Wintering bird populations have been well monitored since the 1970s.	The site is situated approximately 1 km east of Tramore Co. Waterford on the south-east coast. It comprises a shallow and sheltered intertidal area known as the Back Strand enclosed by a substantial sand spit Tramore Burrow. At low tide substantial areas of sand and mud flats are uncovered. <i>Zostera</i> is present and <i>Spartina</i> is well established. The intertidal flats merge in places with salt marsh vegetation. The main rivers which flow into the site are the Keiloge and Glendudda. The land to the north and east of the site is fairly intensive agricultural land while to the west the town of Tramore encroaches with the city landfill close to the site.
000697	Bannow Bay SAC	Site is important for presence of eleven habitats listed on Annex I of Habitats Directive. Halophilous scrub at the site is one of only two examples in the country. The legally protected <i>Arthrocnemum perenne</i> is found there.	Relatively large estuarine site on south-east coast of Ireland. Typical coastal estuary with large areas of mud and sand and restricted access to the sea. Small rivers and streams to the north and south-west flow into the bay.

Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>The site includes an important SPA. Internationally important numbers of <i>Branta bernicla hrota</i> found and nationally important numbers of <i>Tadorna tadorna</i> <i>Anas acuta</i> <i>Calidris Vanellus vanellus</i> <i>Calidris alpina</i> <i>Limosa limosa islandica</i> <i>L. lapponica</i> <i>Tringa totanus</i> and <i>Plurialis apricaria</i> <i>Egretta garzetta</i> <i>Alcedo atthis</i> and <i>Sterna albifrons</i> are found and possibly breed in the site. A substantial heronry is located at south-west of site.</p>	<p>The southern end of the site supports a mosaic of sand dune types sea cliffs of clay and rock and extensive sandy beaches. Northern end supports freshwater habitats of marsh wet woodland and non-tidal reedbed. The geology of the site is mainly Ordovician slate rocks with some Cambrian slate at the south-east.</p>
004033	Bannow Bay SPA	<p>Bannow Bay supports an excellent diversity of wintering waterfowl and is one of the most important sites in the south-east. Of particular note is an internationally important population of <i>Branta bernicla hrota</i>. It also supports nationally important numbers of a further 12 species which includes 3.4% of the national total for <i>Tadorna tadorna</i> 3.0% of the total for <i>Limosa limosa</i> 2.6% of the total for <i>Limosa lapponica</i> and 2.6% of the total for <i>Anas acuta</i>. The intertidal sand and mud flats provide excellent feeding for waterfowl species while suitable roosts are provided by the salt marshes and other shoreline habitats. Habitats are generally of good quality. Part of site is a Wildfowl Sanctuary. The site has been well monitored since the 1970s.</p>	<p>Bannow Bay is a large very sheltered estuarine system with a narrow outlet to the sea. Very extensive intertidal mud and sand flats are exposed at low tide with an average width of about 2 km. A number of small to medium sized rivers flow into the site the principal being the Owenduff and the Corock which enter at the top end of the estuary.</p> <p>The sediments have a rich macroinvertebrate fauna with such species as <i>Scrobicularia plana</i> <i>Hediste diversicolor</i> and <i>Arenicola marina</i> being frequent. Salt marshes are well developed in the sheltered areas of the site. The main landuse within the site is shellfish farming. The site is surrounded by agricultural land of moderate to high intensity.</p>
000764	Hook Head SAC	<p>The site has an important example of low-lying south-eastern cliffs of both clay and rock. Quality good. It is of high geological importance and a noted fossil site. It is of particular importance for marine habitats. Infralittoral bedrock communities are species rich (81 and 84 species in the upper infralittoral and 81 and 82 species in the lower infralittoral). Rare to scarce species include the sponge <i>Stryphnus ponderosus</i>; the hydroids <i>Aglaophenia kirchenpaueri</i> and <i>Gymnangium montagui</i>; the anemone <i>Isozoanthus sulcatus</i>; the nudibranch <i>Crimora papillata</i>; the ascidians <i>Distomus variolosus</i> and <i>Stolonica socialis</i>; and the red alga <i>Schizymenia dubyi</i>. Of particular interest is <i>Schizymenia dubyi</i> since Irish populations of this species appear to be concentrated in the south-east of the country. Circalittoral reef communities have good examples of Axinellid sponge communities. Notable species present are: <i>Axinella dissimilis</i> <i>Aglaophenia kirchenpaueri</i></p>	<p>The Hook peninsula is a long narrow low-lying headland which protrudes into the sea in a south-south-west direction on the eastern side of Waterford Harbour. The site includes Baginbun Head. There are c.15 km of coastline most of which has cliffs above a bedrock or boulder beach shoreline. The cliffs are mostly low usually not more than 10-20 m though they reach up to 30 m at Baginbun. The geology of the area is of high interest being an excellent example of the junction between Devonian Old Red Sandstone and overlying Carboniferous Limestone. Fossils are a feature of the limestone rock formations. A large area of the surrounding sea is included in the site. Under the surface of the water the reef has a north-east/south-west orientation and is typically strewn with boulders cobbles and patches of sand and gravel. It is exposed to prevailing wind and swells from the west. Tidal streams tend to be moderate but are strong in some areas.</p>

Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>Gymnangium montagui Alcyonium glomeratum Eunicella verrucosa and Crimora papillata. Sublittoral sediments populated by the burrowing sea cucumber Neopendactyla mixta are noteworthy because this type of community was only recorded seven times by the BioMar survey and the Amphiuira securigera was only recorded at the Kenmare River in Co. Kerry and at Hook Head and the Saltee Islands in Co. Wexford. Has breeding Falco peregrinus and Pyrrhocorax pyrrhocorax and a small seabird colony (mostly Uria aalge).</p>	
000770	Blackstairs Mountains SAC	<p>The importance of the site lies primarily in the extensive areas of high quality dry heath that occur. Limited peat accumulation on the site has allowed the development of this habitat. Wet heath also occurs in the areas where deeper peat has developed. Those areas that have not been afforested are largely undisturbed and relatively intact. The site is home to several scarce plant species including the Red Data Book species Ornithopus perpusillus.</p>	<p>The Blackstairs Mountains are situated at the southern end of the Leinster Mountain Chain. They are composed primarily of granite but also include especially on their eastern side some overlying Ordovician slates and sandstones. The range forms a roughly north-south orientated ridge some 22km long which includes six peaks over 520m. The dominant vegetation of the site is dry heath; this occurs throughout the site but predominantly on the higher sections of the range.</p> <p>Bare rock and scree is found in the highest and steepest sections of the site. Molinia-dominated wet heath/bog vegetation is found in very small amounts at lower levels and by streams. The valley of the Urrin River on the north-east side of the site supports some deciduous woodland and incipient bog. Much of the site is flanked by coniferous forest; this is not confined to the lowlands being found at over 640m north of Mount Leinster.</p>
000831	Cullahill Mountain SAC	<p>The importance of this site lies in the presence of an unusually large area (for south-east Ireland) of unimproved herb-rich calcareous grassland. On a national scale the extent of this habitat is however relatively small. The site boasts a large population of the scarce Green-winged Orchid Orchis morio.</p>	<p>This site is situated on a small limestone plateau on the western side of which is a steep escarpment. Soils are relatively shallow and exposed limestone outcrops are common in several areas of the site. The dominant vegetation comprises herb-rich dry calcareous grassland (Eu-Mesobromenion) in which the occurrence of five orchid species and in particular the abundance of Orchis morio is notable. The western side of the site has Ash/Hazel woodland. The site appears to contain a rich invertebrate fauna.</p>

Site Code	Site Name	Quality of Site	Other Site Characteristics
000869	Lisbigney Bog SAC	The site supports a population of the Annex II snail <i>Vertigo moulinsiana</i> . The site contains a small though significant example of <i>Cladium mariscus</i> fen. Similar habitat in this part of the country is scarce. All recently surveyed sites with confirmed populations of this species are considered important.	This site comprises a small wetland situated c.5 km north-east of Durrow. The principal habitat is fen with reed swamp wet grassland pools and scrub also occurring. At present the site is not used for any particular activity other than light grazing.
002137	Lower River Suir SAC	This site contains a range of Annex I habitats including floating river vegetation eutrophic tall herbs alluvial forest old oak woods yew woods and salt meadows. The site is very important for the presence of a number of scarce and specialised Annex II animal species with particularly important populations of the fish species <i>Salmo salar</i> and <i>Alosa fallax fallax</i> . <i>Lutra lutra</i> is widespread on the system as is <i>Austropotamobius pallipes</i> . The site supports two Annex I priority and five non-priority Annex I habitats. There are four Annex I species of birds present within the site. The rare lichen <i>Lobaria pulmonaria</i> an ancient woodland indicator occurs at Portlaw Oak Woods within the site.	The Suir River system flows through the counties of Tipperary Kilkenny and Waterford. The site consists of all of the freshwater stretches of the Suir immediately south of Thurles the tidal stretches as far as the confluence with the Barrow/Nore immediately east of Cheekpoint in Co. Waterford and many of the tributaries including the Clodiagh the Lingaun Anner Nier Tar Aherlow and Multeen. Much of the system flows through Carboniferous limestone though towards Waterford the geology changes to Old Red Sandstone and Ordovician bedrocks. The site supports a diverse range of habitats including marsh reedbeds wet and dry grasslands broad-leaved semi-natural woodlands salt marshes tidal rivers and estuarine channels. Substantial areas of improved grassland and arable lands are included for water quality reasons.
002252	Thomastown Quarry SAC	The site supports a good example of petrifying springs with several diagnostic bryophyte species. The site is also of note for its general diversity of calcareous habitats over a small area. <i>Erigeron acer</i> a Red Data Book species has been recorded. A limited survey of aquatic invertebrates recorded the presence of two rare species for Ireland <i>Haliphus variegatus</i> and <i>Hesperocorixa moesta</i> . The site also supports <i>Rana temporaria</i> and <i>Triturus vulgaris</i> .	The site comprises a disused limestone quarry just north of the village of Thomastown. Bare rock still accounts for a significant area of the site but most of it now supports wetland and grassland habitats. Water appears to flow eastwards through the site and there are several permanent ponds. Alkaline fen occurs in association with the springs and ponds as does some wet grassland. These wetland habitats are rich in bryophytes. Dry calcareous grassland generally species-rich is fairly widespread.
004233	River Nore SPA	The River Nore supports nationally important numbers of <i>Alcedo atthis</i> . Other species which occur within the site include <i>Cygnus olor</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 Nore SPA is a long linear site that includes the following river sections: the River Nore from the bridge at Townparks (north-west of Borris in Ossory) to Coolnamuck (approximately 3 km south of Inistioge) in Co. Kilkenny; the Delour River from its junction with the River Nore to Derrynaseera bridge (west of Castletown) in Co Laois; the Erkina River from its junction with the River Nore at

Site Code	Site Name	Quality of Site	Other Site Characteristics
			<p>Durrow Mills to Boston Bridge in Co. Laois; a 1.5 km stretch of the River Goul upstream of its junction with the Erkina River; the Kings River from its junction with the River Nore to a bridge at Mill Island Co. Kilkenny. The site includes the river channel and marginal vegetation.</p>
000404	Hugginstown Fen SAC	<p>The site supports an important example of alkaline fen vegetation and is considered one of best sites in the south-east region. It has a diverse vegetation including some scarce plants such as <i>Oenanthe fistulosa</i>. The site is in a fairly natural state and quality is generally good. Some rare insects have been recorded notably <i>Lestes dryas</i> and <i>Parhelophilus consimilis</i>. <i>Rana temporaria</i> is common at the site.</p>	<p>The site occupies a narrow low-lying basin on limestone glacial till overlying acid Old Red Sandstone. It comprises a relatively large wetland dominated by swamp and fen vegetation. The wetland has a small catchment and is partly fed by iron rich springs. The northern part of the site is dominated by <i>Phragmites</i> swamp but much of the remainder consists of species-rich fen partly developed on floating mats of <i>Carex diandra</i> with beds of <i>Typha latifolia</i> or <i>Phragmites</i> scattered throughout and especially adjacent to spring areas.</p> <p>Species-rich Junco-Molinion grassland occurs in drained areas at the southern and northern ends of the site and around the margins at the peat-mineral interface. Surrounding land is mainly improved grassland used for pasture.</p>
000407	The Loughans SAC	<p>This turlough is the highest in altitude and also at the SE margin of the range of this habitat - 55km from similar sites by Lough Derg. The vegetation shows relatively little diversity (10 out of a possible 32 types) but includes many plants rare in the county for example it is the only site for <i>Rorippa islandica</i> and <i>Chenopodium rubrum</i>.</p>	<p>The Loughans is a shallow basin surrounded by pasture land with low banks of calcareous drift extending out from the northern side. Some of these carry a species-rich heathy grassland with scattered bushes. There are two shallow ponds with aquatic plants but most of the floor dries out in summer and is grazed. Swallow holes occur in the SE corner and on the western side. The internal channels seem to have no real drainage effect.</p>
000671	Tramore Dunes and Backstrand SAC	<p>Tramore dunes are a fine example of a sand spit developed on a shingle ridge and represents one of the few dunes systems on the south coast of Ireland. The fixed dunes are substantial in area though species diversity is low due to the absence of grazing. The fixed dunes are complemented by small though good examples of shifting marram dunes and embryonic dunes. The salt marshes are of the lagoon type a rare type in Ireland and both Atlantic and Mediterranean communities are well represented.</p>	<p>Site is situated approximately 1 km east of Tramore Co. Waterford on the south-east coast. Site comprises a shallow and sheltered intertidal area known as the Back Strand enclosed by a substantial sand spit Tramore Burrow. The extreme inner part of the intertidal area is particularly well sheltered as it is bounded by an embankment with a narrow gap. Here salt marsh vegetation <i>Spartina</i> swards and communities of <i>Salicornia</i> and other annuals thrive.</p>

Site Code	Site Name	Quality of Site	Other Site Characteristics
		<p>The intertidal sand and mud flats are of moderate size and have <i>Zostera</i> communities. Five Red Data Book plant species have been known from the site and one <i>Polygonum maritimum</i> has its only Irish station here. Site supports important wintering waterfowl populations with <i>Branta bernicla hrota</i> in international numbers and seven other species in numbers of national importance. Two species listed on Annex I of the Birds Directive occur - <i>Pluvialis apricaria</i> and <i>Limosa lapponica</i>.</p>	<p>The spit is dominated by a substantial dune system and on the seaward side there is a fine sandy beach with a shingle element. The land to the north and east of the site is fairly intensive agricultural land while to the west the town of Tramore encroaches with the city landfill adjacent to the site. Recreational activities are the main landuse within the site.</p>
001858	Galmoy Fen SAC	<p>The site contains a good example of alkaline fen vegetation that has developed partly due to cutting of a former raised bog. Fen habitat is rare in the region. The site contains a typical range of species including <i>Schoenus nigricans</i> and supports the Red Data Book species <i>Rana temporaria</i> and <i>Lepus timidus hibernicus</i>.</p>	<p>Galmoy Fen is situated 7 km north of Johnstown in Co. Kilkenny. It lies in a depression and is underlain by Carboniferous limestone. The central part of the site comprises an area of cutover raised bog with numerous peat-cuttings resulting in a mosaic of dry peat banks and wet peaty pools. The pools have become flooded with base-rich groundwater and now support alkaline fen vegetation.</p> <p>A large area of fen vegetation surrounds the central part of the site; this area has a number of large pools that support calcicole species. Other habitats present on the site include scrub wet grassland improved grassland dry calcareous grassland and a small area planted with <i>Picea sitchensis</i>. A stream brings water to the site on its north-east side. Surrounding landuse is mainly agricultural.</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 Margaritifera margaritifera</i> M.m. <i>durrovensis</i> <i>Alosa fallax fallax</i> <i>Austroptamobius 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.</p>

Site Code	Site Name	Quality of Site	Other Site Characteristics
			A wide range of habitats associated with the rivers are included within the site including substantial areas of woodland (deciduous mixed) dry heath wet grassland swamp and marsh vegetation salt marshes a small dune system biogenic reefs and intertidal sand and mud flats. Areas of improved grassland arable land and coniferous plantations are included in the site for water quality reasons.
002256	Ballyprior Grassland SAC	<p>An estimated 35 hectares 45% of the site area consists of the Annex 1 Priority Habitat orchid-rich calcareous grassland which supports a rich diversity of both calcicole and calcifuge species the latter occurring on mineral poor drift. The site has an exceptionally rich mycoflora and this is a better indication of grassland quality (in terms of continuity lack of disturbance and low nutrient status) than the vascular flora. The Irish Hare <i>Lepus timidus hibernicus</i> recorded as occurring in the site.</p> <p>This sub-species is listed in Annex III of the Bern Convention and in the Red Data Book as Internationally Important. It is legally protected by the Wildlife Act (1976).</p>	<p>The site consists of a limestone plateau supporting open calcareous grassland with occasional rocky scarps and valleys but with little surface water and no streams. Soils are thin on the plateau but deeper with local drift in low areas and valley bottom. Scrub of <i>Crataegus monogyna</i> <i>Prunus spinosa</i> <i>Rubus fruticosus</i> with bracken <i>Pteridium aquilium</i> or Gorse Scrub of <i>Ulex europaea</i> is frequent in the east and north of the site.</p> <p>Scrub woodland of predominantly Hazel <i>Corylus avellana</i> with <i>Fraxinus excelsior</i> and a well developed ground flora occurs in the extreme west of the site. There are also a few ponds scattered within the site.</p>
004193	Mid-Waterford Coast SPA	<p>This site supports a nationally important population of breeding <i>Pyrhocorax pyrrhocorax</i> a Red Data book species. 24 breeding pairs were recorded in the 1992 survey and 20 in the 2002/03 survey. The site supports an important <i>Falco peregrinus</i> population (7 pairs in 2002). The site also holds nationally important populations of <i>Phalacrocorax carbo</i> (79 pairs) and <i>Larus argentatus</i> (147 pairs) as well as smaller numbers of other breeding seabirds.</p>	<p>The Mid-Waterford Coast SPA encompasses the areas of high coast and sea cliffs in Co. Waterford between Newtown Cove to the east and Ballyvoyle to the west. The site includes the sea cliffs and the land adjacent to the cliff edge. The high water mark forms the sea boundary. The site is underlain by Devonian sandstones siltstones mudstones and conglomerates as well as a variety of volcanic rocks of Ordovician age. Sea cliffs are the predominant habitat of the site; these occur along its length and are generally well-vegetated by a suite of typical sea cliffs species. Above the cliffs are areas of heath improved grassland unimproved wet and dry grassland and woodland. Landuse is predominately grazing by stock, but some arable farming is also carried out.</p>

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
000404	Hugginstown Fen SAC	Alkaline fens [7230]	A08, A04, B02	Fertilisation, Grazing, Forest and Plantation management & use
000407	The Loughans SAC	Turloughs [3180]	A04.01.01, A04, A08	Intensive cattle grazing, Grazing, Fertilisation
000671	Tramore Dunes and Backstrand SAC	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Mediterranean salt meadows (Juncetalia maritimi) [1410], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Perennial vegetation of stony banks [1220], Mudflats and sandflats not covered by seawater at low tide [1140], Embryonic shifting dunes [2110]	F02.03, A04, G02.08, C01.01.02, E03, G01.02, F02.03.01, I01, F03.01, E01	Leisure fishing, Grazing, Camping and caravans, Removal of beach materials, Discharges, Walking, horseriding and non-motorised vehicles, Bait digging or collection, Invasive non-native species, Hunting, Urbanised areas, human habitation
000697	Bannow Bay SAC	Estuaries [1130], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Embryonic shifting dunes [2110], Salicornia and other annuals colonising mud and sand [1310], Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi) [1420], Perennial vegetation of stony banks [1220], Mediterranean salt meadows (Juncetalia maritimi) [1410], Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Annual vegetation of drift lines [1210]	J02.02, B01, G01.03.02, D01.01, I01, F01.01, X, K01.01, F02.03.01, E03.01, J02.11.01, E03, C01.01.02	Removal of sediments (mud...), Forest planting on open ground, Off-road motorized driving, Paths, tracks, cycling tracks, Invasive non-native species, Intensive fish farming, intensification, No threats or pressures, Erosion, Bait digging or collection, Disposal of household or recreational facility waste, Dumping, depositing of dredged deposits, Discharges, Removal of beach materials

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000764	Hook Head SAC	Large shallow inlets and bays [1160], Reefs [1170], Vegetated sea cliffs of the Atlantic and Baltic Coasts [1230]	X, J02.11.01, K01.01, G01.07, F02	No threats or pressures, Dumping, depositing of dredged deposits, Erosion, Scuba diving, snorkelling, Fishing and harvesting aquatic resources
000770	Blackstairs Mountains SAC	Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010], European dry heaths [4030]	K01.01, G01.02, K02.01, G01.03.02, E03, A04.02, B02, J01.01, A04.01.02	Erosion, Walking, horseriding and non-motorised vehicles, Species composition change (succession), Off-road motorized driving, Discharges, Non intensive grazing, Forest and Plantation management & use, Burning down, Intensive sheep grazing
000781	Slaney River Valley SAC	Brook lamprey (<i>Lampetra planeri</i>) [1096], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], Estuaries [1130], Harbour seal (<i>Phoca vitulina</i>) [1365], 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], Sea lamprey (<i>Petromyzon marinus</i>) [1095], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1029], Water courses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260], Otter (<i>Lutra lutra</i>) [1355], Twaithe shad (<i>Alosa fallax</i>) [1103], Mudflats and sandflats not covered by seawater at low tide [1140], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330], Atlantic salmon (<i>Salmo salar</i>) [1106]	A01, F03.02.04, A08, H01.08, C01.01, B02, J02.11, J02.06, E03, D01.01, J02.06.01, H01.05, H01, A09, D01.05, H01.01, J02, F01.03, K01.01, E05, D03.01.03, J02.12.02, F02.03.01, A10.01, J02.05.02, I01	Cultivation, Predator control, Fertilisation, Diffuse pollution to surface waters due to household sewage and waste waters, Sand and gravel extraction, Forest and Plantation management & use, Siltation rate changes, dumping, depositing of dredged deposits, Water abstractions from surface waters, Discharges, Paths, tracks, cycling tracks, Surface water abstractions for agriculture, Diffuse pollution to surface waters due to agricultural and forestry activities, Pollution to surface waters (limnic & terrestrial, marine & brackish), Irrigation, Bridge, viaduct, Pollution to surface waters by industrial plants, Human induced changes in hydraulic conditions, Bottom culture, Erosion, Storage of materials, Fishing harbours, Dykes and flooding defense in inland water systems, Bait digging or collection, Removal of hedges and copses or scrub, Modifying structures of inland water courses, Invasive non-native species
000831	Cullahill Mountain SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) * important orchid sites [6210]	A10.01, A03.02, A04.03	Removal of hedges and copses or scrub, Non intensive mowing, Abandonment of pastoral systems lack of grazing

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
000849	Spahill and Clomantagh Hill SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04.01, A08, A10.01, X	Intensive grazing, Fertilisation, Removal of hedges and copses or scrub, No threats or pressures
000869	Lisbigney Bog SAC	Desmoulin`s whorl snail (Vertigo moulinsiana) [1016], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]	J02.01, E03.03, J01.01, E03.01, K02.01, X, A04.03	Landfill, land reclamation and drying out, general, Disposal of inert materials, Burning down, Disposal of household or recreational facility waste, Species composition change (succession), No threats or pressures, Abandonment of pastoral systems lack of grazing
001858	Galmoy Fen SAC	Alkaline fens [7230]	B, X, C01.04.02, A04	Sylviculture, forestry, No threats or pressures, Underground mining, Grazing
001952	Comeragh Mountains SAC	Siliceous rocky slopes with chasmophytic vegetation [8220], Calcareous rocky slopes with chasmophytic vegetation [8210], Alpine and Boreal heaths [4060], Slender green feather-moss (Hamatocaulis vernicosus) [6216], Northern Atlantic wet heaths with Erica tetralix [4010], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], European dry heaths [4030], Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Blanket bogs * if active bog [7130]	D01.02, B, C01.03, E02, A04, K01.01, E06, I01, G01.02, J01	Roads, motorways, Sylviculture, forestry, Peat extraction, Industrial or commercial areas, Grazing, Erosion, Other urbanisation, industrial and similar activities, Invasive non-native species, Walking, horseriding and non-motorised vehicles, Fire and fire suppression
002137	Lower River Suir SAC	Freshwater pearl mussel (Margaritifera margaritifera) [1029], Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0], White-clawed crayfish (Austropotamobius pallipes) [1092], Brook lamprey (Lampetra planeri) [1096], Twaite shad (Alosa fallax) [1103], Atlantic salmon (Salmo salar) [1106], Otter (Lutra lutra) [1355], Hydrophilous tall herb fringe communities of plains and of the montane to alpine	A01, A08, J02.01.02, D03.01, X, H01, E03, J02.12.02, E01, B, I01, J02.01	Cultivation, Fertilisation, Reclamation of land from sea, estuary or marsh, Port areas, No threats or pressures, Pollution to surface waters (limnic & terrestrial, marine & brackish), Discharges, Dykes and flooding defense in inland water systems, Urbanised areas, human habitation, Sylviculture, forestry, Invasive non-native species, Landfill, land reclamation and drying out, general

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		levels [6430], <i>Taxus baccata</i> woods of the British Isles [91J0], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330], Sea lamprey (<i>Petromyzon marinus</i>) [1095], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]		
002162	River Barrow and River Nore SAC	Freshwater pearl mussel (<i>Margaritifera margaritifera</i>) [1029], Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430], Desmoulin's whorl snail (<i>Vertigo moulinsiana</i>) [1016], Otter (<i>Lutra lutra</i>) [1355], Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220], Nore Pearl Mussel (<i>Margaritifera durrovensis</i>) [1990], Estuaries [1130], Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260], Killarney fern (<i>Trichomanes speciosum</i>) [1421], European dry heaths [4030], Sea lamprey (<i>Petromyzon marinus</i>) [1095], Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0], <i>Salicornia</i> and other annuals colonising mud and sand [1310], Mudflats and sandflats not covered by seawater at low tide [1140], 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], Reefs [1170], Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410], River lamprey (<i>Lampetra fluviatilis</i>) [1099], Twaite shad (<i>Alosa fallax</i>) [1103], Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330], White-clawed crayfish (<i>Austroptamobius pallipes</i>)	J02.12.02, F02.01.02, A02.01, C01.03, F02, J02.05.02, B07, J02.02.01, B05, A10.01, A04.01.01, F02.03, J03.02.01, J02, B02.01.01, D03.01, H01, B02, F01.01, C01.01.01, E02, I01, K01.01, J02.06, M01	Dykes and flooding defense in inland water systems, Netting, Agricultural intensification, Peat extraction, Fishing and harvesting aquatic resources, Modifying structures of inland water courses, Forestry activities not referred to above, Dredging or removal of limnic sediments, Use of fertilizers (forestry), Removal of hedges and copses or scrub, Intensive cattle grazing, Leisure fishing, Reduction in migration or migration barriers, Human induced changes in hydraulic conditions, Forest replanting (native trees), Port areas, Pollution to surface waters (limnic & terrestrial, marine & brackish), Forest and Plantation management & use, Intensive fish farming, intensification, Sand and gravel quarries, Industrial or commercial areas, Invasive non-native species, Erosion, Water abstractions from surface waters, Changes in abiotic conditions

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
		[1092], Atlantic salmon (<i>Salmo salar</i>) [1106], Brook lamprey (<i>Lampetra planeri</i>) [1096]		
002252	Thomastown Quarry SAC	Petrifying springs with tufa formation (Cratoneurion) [7220]	K04.01, X, A04.03, E01	Competition (flora), No threats or pressures, Abandonment of pastoral systems lack of grazing, Urbanised areas, human habitation
002256	Ballyprior Grassland SAC	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	A04, A08, D01.01, A10, A03, B02.01, A10.01	Grazing, Fertilisation, Paths, tracks, cycling tracks, Restructuring agricultural land holding, Mowing or cutting of grassland, Forest replanting, Removal of hedges and copses or scrub
004027	Tramore Back Strand SPA	Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Lapwing (<i>Vanellus vanellus</i>) [A142], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wetland and Waterbirds [A999], Curlew (<i>Numenius arquata</i>) [A160], Dunlin (<i>Calidris alpina</i>) [A149], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Black-tailed Godwit (<i>Limosa limosa</i>) [A156]	G01.02, I01, H, A08, E01, A04, E03	Walking, horseriding and non-motorised vehicles, Invasive non-native species, Pollution, Fertilisation, Urbanised areas, human habitation, Grazing, Discharges
004033	Bannow Bay SPA	Wetland and Waterbirds [A999], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Curlew (<i>Numenius arquata</i>) [A160], Lapwing (<i>Vanellus vanellus</i>) [A142], Pintail (<i>Anas acuta</i>) [A054], Redshank (<i>Tringa totanus</i>) [A162], Shelduck (<i>Tadorna tadorna</i>) [A048], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Knot (<i>Calidris canutus</i>) [A143], Dunlin (<i>Calidris alpina</i>) [A149], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	D01.02, E01.03, A04, F03.01, F01, G01, A08	Roads, motorways, Dispersed habitation, Grazing, Hunting, Marine and Freshwater Aquaculture, Outdoor sports and leisure activities, recreational activities, Fertilisation

Site Code	Site Name	Qualifying Feature	Pressures Codes	Known Threats and Pressures
004193	Mid-Waterford Coast SPA	Cormorant (<i>Phalacrocorax carbo</i>) [A017], Chough (<i>Pyrhocorax pyrrhocorax</i>) [A346], Herring Gull (<i>Larus argentatus</i>) [A184], Peregrine falcon (<i>Falco peregrinus</i>) [A103]	A02, A04, E04.01, A04.03, E05	Modification of cultivation practices, Grazing, Agricultural structures, buildings in the landscape, Abandonment of pastoral systems lack of grazing, Storage of materials
004233	River Nore SPA	Kingfisher (<i>Alcedo atthis</i>) [A229]	X, J02.01, D03.01	No threats or pressures, Landfill, land reclamation and drying out, general, Port areas

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
Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)	[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 (<i>Margaritifera margaritifera</i>)	[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 (<i>Austropotamobius pallipes</i>)	[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 (<i>Petromyzon marinus</i>)	[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 (<i>Lampetra planeri</i>)	[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 (<i>Lampetra fluviatilis</i>)	[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.
Twaiite Shad (<i>Alosa fallax fallax</i>)	[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 (<i>Salmo salar</i>)	[1106]	Marine survival rates are of concern for the populations.	Disease, parasites and barriers to movement.
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

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
			to pollution. Changes to salinity and tidal regime. Coastal development.
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.
Salicornia and other annuals colonising mud and sand	[1310]	Invasive Species; erosion and accretion.	Marine water dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	[1330]	Overgrazing; erosion; invasive species, particularly common cordgrass (<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.
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;	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
		drainage; management of aquatic and bank vegetation for drainage purposes; and canalization or modifying structures of inland water course.	
Harbour Seal(<i>Phoca vitulina</i>)	[1365]	Distance to human activities, accidental entanglement in fishing gear competition for prey resources, illegal killing, pollution and habitat degradation.	Prey availability, reduction in available habitat and water quality.
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.
Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>)	[1420]	Area losses, associated with algal mats formed as a consequence of water pollution, which resulted in a contraction of the range of the habitat.	Changes in management. Changes in nutrient or base status. Introduction of alien species.
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.
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(<i>Ammophila arenaria</i>)	[2120]	Recreation and coastal defences, which may interfere with local sediment dynamics.	Overgrazing, and erosion. Changes in management.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Fixed coastal dunes with herbaceous vegetation (grey dunes)	[2130]	Recreation; overgrazing and inappropriate grazing; non-native plant species, particularly sea buckthorn (<i>Hippophae rhamnoides</i>).	Overgrazing, and erosion. Changes in management.
Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	[3110]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Turloughs	[3180]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Water courses of plain to montane levels with vegetation (<i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i>)	[3260]	Hydrological and morphological changes, water quality, enrichment, and surface water discharges from industrial site and/or agriculture.	Surface water dependent Highly sensitive to hydrological change and direct physical interactions.
Northern Atlantic wet heaths with <i>Erica tetralix</i>	[4010]	Reclamation, afforestation and burning; overstocking; invasion by non-heath species; exposure of peat to severe erosion.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
European dry heaths	[4030]	Afforestation, overburning, over-grazing, under-grazing and bracken invasion.	Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status.
Alpine and Boreal heaths	[4060]	Abandonment; overgrazing; burning; outdoor recreation; quarries; communication networks; and wind farm developments.	Changes in management. Changes in nutrient or base status. Moderately sensitive to hydrological change.
Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>)* 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.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
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.
Blanket bogs (* if active bog)	[7130]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface water interactions. Drainage and land use management are the key things.
Calcareous fens with species of mariscus sedge and bog cotton (Cladium mariscus and Caricion davallianae)	[7210]	Hydrological changes, pollution to surface waters, urbanisation, roads development, groundwater interactions, grazing and cultivation practices and the inappropriate use of pesticides.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Petrifying springs with tufa formation (Cratoneurion)	[7220]	Ground water interactions, on site management activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Alkaline fens	[7230]	Land reclamation, peat extraction; afforestation; erosion and landslides triggered by human activity; drainage; burning and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management.
Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)	[8110]	Overgrazing, undergrazing and succession were recorded as medium-importance pressures in this reporting period, and Structure and functions were again assessed as Inadequate, the trend is considered to be stable rather than improving. This change is due to improved knowledge and the habitat is considered to have been stable since before the last assessment.	Erosion, overgrazing and recreation.
Calcareous rocky slopes with chasmophytic vegetation	[8210]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation.

Qualifying Interests	EU Code	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Siliceous rocky slopes with chasmophytic vegetation	[8220]	Pressures associated with the non-native invasive species New Zealand willowherb (<i>Epilobium brunnescens</i>).	Erosion, overgrazing and recreation.
Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> 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.
Taxus baccata woods of the British Isles	[91J0]	Invasive Species; erosion and accretion.	Changes in management. Changes in nutrient or base status. Introduction of alien species.

Appendix 1 - Table 4 Known threats and pressures related to the qualifying interests from each Special 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
A017	Cormorant	Phalacrocorax carbo carbo	D01	Wind, wave and tidal power, including infrastructure
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
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
A103	Peregrine Falcon	Falco peregrinus peregrinus	C03, F03, J03, M02	Renewable abiotic energy use, Hunting and collection of wild animals (terrestrial), Other Ecosystem Modifications, Changes in biotic conditions
A130	Eurasian Oystercatcher	Haematopus ostralegus	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
A140	European Golden Plover	Pluvialis apricaria	A02, A04, B01, C01, C03, F01, G01, H03, J01, K03, M02	Modification of cultivation practices, Grazing, Forest planting on open ground, Mining and quarrying, Renewable abiotic energy use, Marine and Freshwater

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
				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
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 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
A184	European Herring Gull	<i>Larus argentatus</i>	C03, F02, H03, J03	Renewable abiotic energy use, Fishing and harvesting aquatic resources, Marine water pollution, Other Ecosystem Modifications
A229	Common Kingfisher	<i>Alcedo atthis</i>	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
A346	Red-Billed Chough	<i>Pyrrhocorax pyrrhocorax</i>	A02, A04, E06, G01	Modification of cultivation practices, Grazing, Other urbanisation, industrial and similar activities, Outdoor sports and leisure activities, recreational activities



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