NATURA IMPACT STATEMENT

IN SUPPORT OF THE

APPROPRIATE ASSESSMENT

FOR THE

DRAFT BURREN AND CLIFFS OF MOHER VISITOR EXPERIENCE DEVELOPMENT PLAN

for: **Fáilte Ireland**
88-95 Amiens Street
Dublin 1

by: **CAAS Ltd.**
1st Floor
24-26 Ormond Quay
Dublin 7

OCTOBER 2019

Table of Contents

Section 1 Introduction

1.1 Background

This Natura Impact Statement has been prepared in support of the Appropriate Assessment (AA) of the Burren and Cliffs of Moher Visitor Experience Development Plan (VEDP) in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the "Habitats Directive").

This report is part of the ongoing AA process that is being undertaken alongside the preparation of the VEDP. It will be considered, alongside other documentation prepared as part of this process, when Fáilte Ireland finalises the AA at adoption of the VEDP.

1.2 Legislative Context

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

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

1.3 Approach

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

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

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

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

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

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

Stage Three: Assessment of Alternative Solutions
The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain
An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

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

The assessment of potential effects on European sites is conducted following a standard source-pathway-receptor[1] model, where, in order for an effect to be established all three elements of this mechanism must be in place. The absence or removal of one of the elements of the model is sufficient to conclude that a potential effect is not of any relevance or significance.

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

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

- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, 2009;
- "Commission Notice: Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;
- "Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC", European Commission Environment DG, 2002; and
- "Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC", European Commission, 2000.

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

Section 2 Description of the Plan

The Visitor Experience Development Plan's (VEDP's) **vision** is to: *'Increase dwell time and inspire visitors and the next generation to become custodians of the Burren and Cliffs of Moher'*.

The VEDP has been developed in recognition of the need for improved development and promotion of the area's unique features to achieve increased international cut through. The VEDP also recognises that *"With the extensive increase in visitor numbers during peak season to the Burren and Cliffs of Moher, visitor management and identifying total capacity numbers is required to ensure that the FIT (Free and Independent Traveller) visitor experience is improved and to protect and sustain the values and communities that created a profoundly unique tourist destination for Ireland."*

The VEDP recommends **guiding principles** and future measures of success including:

- Increase environmental conservation through sustainable tourism;
- Build community support for tourism through events and local-buy programmes;
- Boost the visitor connection with the Burren and overall visitor satisfaction;
- Maximise the economic and social of tourism to the destination; and
- Implement measures for visitor management that will help to improve the overall visitor experience as well as retain (and in some cases improve) the region's unique natural heritage and cultural assets.

The **key objectives** of the Burren and Cliffs of Moher VEDP are to develop hero, supporting and ancillary experiences for the region that will:

- Motivate visitors to stay longer and spend more;
- Extend the length of the season;
- Align to relevant brand, target markets and segments;
- Sustain and increase job creation in the local area; and
- Protect the special environmental character of the region.

It is the **aim** of the VEDP to:

- Encourage and engage businesses and local partners;
- Maintain business engagement beyond the project lifetime; and
- Build lasting links between national partners and local tourism experiences.

The Burren and Cliffs of Moher area is under the **Wild Atlantic Way key proposition**, which is to "Experience one of the wildest, most enhancing and culturally rich coastal touring routes in the world. Wherever you travel along the Wild Atlantic Way you'll find magic, adventure, history and beauty in abundance".

The VEDP identifies seven **Hero Experiences** (stories that customers can connect with that showcase the Wild Atlantic Way key proposition) that are supported by various **Hero Products** (the customer accesses these experiences through the Hero Products) and **Supporting Experiences** (what each business does to bring the hero products to life) and **Ancillary Experiences** (how the wider tourism offering supports the regional themes).

Central to the VEDP is the **Action Plan** that arranges various **recommendations** (including nine **Catalyst Projects** and **other Actions**) under seven **Hero Experiences** and four **Enablers of Success**.

Catalyst Projects recommended are as follows:

1. Develop and implement an Integrated Traffic and Transport Strategy for the Burren and Cliffs of Moher.
2. Upgrade 2km of the Cliff Walk (1km either side of the Cliffs of Moher Visitor Centre) through a partnership with land owners and National Parks to develop a management plan and future funding model that supports the land owners and allows for reinvestment and a sustainable walking infrastructure.
3. Develop a winter Burren Music, Dance & Story Trail connecting visitors with music, dance, stories and traditions of the place – people and villages.

4. Create a 'Wellness the Wild Atlantic Way' programme and dedicated section on the Fáilte Ireland website that looks at the broader definition of 'wellness' including connection, time in nature, and the need to sleep well, as well as the traditional, relaxation, healthy food and exercise elements.
5. Develop the Burren Discovery Trail to assist in dispersing independent travellers eastward to the Burren Lowlands and provide interpretive content to interpret the landscape and reveal the underlying stories.
6. Support farmers keen to diversify their business to include tourism with a business support programme and guidance on insurance and planning requirements and investment in sustainable tourism experiences.
7. Be a Custodian for a day - join the Geopark to experience what is involved in managing a Global Geopark.
8. Facilitate workshop(s) to assist in further developing and promoting a series of cultural events that encourage year-round visitation through dedicated timely funding.
9. Encourage the establishment of new eco-friendly, responsible adventure experiences such as new cycling experiences along the green roads including mountain-biking and the 'edge' experience.

Hero Experiences are as follows:

1. Walk on the Edge of the World along the Cliffs of Moher.
2. Adventure On and Under in the Burren: diving, surfing, caving – 'the Edge'.
3. Walk the Burren Way through the Living Landscape shaped by 360 million years of water and Thousands of Years of Farming Traditions.
4. See Life shaped by the Ancient Farming Landscape of the Burren to see the Ancient Traditions Continue.
5. Experience Wellness the Wild Atlantic Way through Immersion of the Senses
6. Savour the Unique Local Flavours of the Burren.
7. Immerse yourself in the Music and Dance of the Burren and see the Lineage of Stories, Songs & Sounds of the Sea.

Enablers of Success recommended are as follows:

1. Visitor Management and Dispersal.
2. Better Collaboration Between Groups.
3. Inspire and Create Confidence in Sharing Stories.
4. Effective Marketing and Promotion.

Implementing the Plan will involve Fáilte Ireland helping to facilitate, promote, support and coordinate stakeholders (including local authorities, other government agencies, tourism operators, communities and visitors) in their activities in a way that is consistent with existing and emerging plans that have been subject to environmental assessment. The Plan does not provide consent, establish a framework for granting consent or contribute towards a framework for granting consent.

Fáilte Ireland provides funding for sustainable tourism projects that emerge as part of specific, competitive, themed and time-bound grant schemes or as part of wider strategic partnerships. These include projects relating to land use, infrastructural development and land use activities and attractions. Reference made to such projects included in the Plan does not guarantee funding. While funding is provided to certain projects, Fáilte Ireland is not the developer.

In order to achieve funding (including promotion) for land use or infrastructural development or land use activities from Fáilte Ireland, Fáilte Ireland's stakeholders shall be required to demonstrate compliance[2] with measures relating to sustainable development, environmental protection and environmental management contained within the following Fáilte Ireland published documents:

- Wild Atlantic Way Operational Programme Appendix 5 "Site Maintenance Guidelines" and other relevant measures from the Fáilte Ireland visitor and habitat management guidelines series; and
- Wild Atlantic Way Operational Programme Appendix 6 "Environmental Management for Local Authorities and Others".

The Plan is situated alongside a hierarchy of statutory documents setting out public policy for, among other things, land use development, tourism, infrastructure, sustainable development, environmental protection and environmental management. These other existing policies, plans etc. have been subject to their own environmental assessment processes, as relevant, and form the decision-making and consent-granting framework.

The National Planning Framework (NPF) sets out Ireland's planning policy direction for the next 22 years. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSESs for both the Southern Region and the Northern and Western Region set out objectives relating tourism development, that have been subject

[2] Demonstration of compliance may be supported by monitoring undertaken by the beneficiary.

to environmental assessment, including those relating to: enhancing provision of tourism and leisure amenity; promoting tourism activity; developing a road network and public transport services, facilitating improved visitor access and longer dwell times; developing walking and cycling trails, opening greater accessibility to the marine and countryside environment by sustainable modes; and facilitating appropriate tourism development, including that relating to greenways, blueways and peatlands. When adopted, the RSESs will inform the review of existing, assessed Development Plans and Local Area Plans, which already include various provisions relating to land use, tourism and infrastructure. Such reviews will also be subject to environmental assessments.

Implementation of the Plan shall be consistent with and conform with the NPF, RSESs and lower-tier land use plans, including provisions relating to sustainable development, environmental protection and environmental management that have been integrated into these documents including through SEA and AA processes. In order to be realised, projects included in the Plan (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework, of which the Plan is not part and does not contribute towards.

Section 3 Screening for Appropriate Assessment

3.1 Introduction to Screening

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

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

The following NPWS Generic Conservation Objectives have been considered in the screening:

- For SACs, to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected; and
- For SPAs, to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

Where available, Site-Specific Conservation Objectives (SSCOs) designed to define favourable conservation status for a particular habitat[3] or species[4] at that site have been considered.

3.2 Identification of Relevant European sites

The Department of the Environment (2009) Guidance on AA recommends a 15 km buffer zone to be considered. A review of all sites within this zone has allowed a determination to be made that in the absence of significant hydrological links the characteristics of the VEDP will not impose effects beyond the 15 km buffer.

Details of European sites that occur within 15 km of the VEDP is listed in Table 3.1. European Sites and EPA Rivers and Catchments are also mapped in Figure 3.1 below. Information on QIs, SCIs and site-specific vulnerabilities and sensitivities (see Appendix I) and background information (such as that within Ireland's Article 17 Report to the European Commission, site synopses and Natura 2000 standard data forms) has been considered by both the AA screening assessment (provided under this section) and Stage 2 AA (provided under Section 4). Conservation objectives that have been considered by the assessment are included in the following NPWS/ Department of Culture, Heritage and the Gaeltacht documents:

- (2017) Conservation Objectives: Ballyallia Lake SAC 000014. Version 1.
- (2018) Conservation Objectives: Ballycullinan Lake SAC 000016. Version 1.
- (2018) Conservation Objectives: Ballyogan Lough SAC 000019. Version 1.
- (2014) Conservation Objectives: Black Head-Poulsallagh Complex SAC 000020. Version 1.
- (2018) Conservation Objectives: Dromore Woods and Loughs SAC 000032. Version 1.
- (2017) Conservation Objectives: Inagh River Estuary SAC 000036. Version 1.
- (2018) Conservation Objectives: Pouladatig Cave SAC 000037. Version 1.
- (2018) Conservation Objectives for Moneen Mountain SAC [000054]. Generic Version 6.0.
- (2018) Conservation Objectives: Moyree River System SAC 000057. Version 1.
- (2014) Conservation Objectives: Inishmaan Island SAC 000212. Version 1.
- (2018) Conservation Objectives: Caherglassaun Turlough SAC 000238. Version 1.
- (2018) Conservation Objectives for Castletaylor Complex SAC [000242]. Generic Version 6.0.
- (2018) Conservation Objectives for Coole-Garryland Complex SAC [000252]. Generic Version 6.0.
- (2013) Conservation Objectives: Galway Bay Complex SAC 000268. Version 1.

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

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

- (2018) Conservation Objectives: Kiltartan Cave (Coole) SAC 000286. Version 1.
- (2017) Conservation Objectives: Lough Corrib SAC 000297. Version 1.
- (2018) Conservation Objectives: Lough Cutra SAC 000299. Version 1.
- (2018) Conservation Objectives for Peterswell Turlough SAC [000318]. Generic Version 6.0.
- (2018) Conservation Objectives for Rahasane Turlough SAC [000322]. Generic Version 6.0.
- (2018) Conservation Objectives for Ballyteige (Clare) SAC [000994]. Generic Version 6.0.
- (2018) Conservation Objectives for Ballyvaughan Turlough SAC [000996]. Generic Version 6.0.
- (2014) Conservation Objectives: Carrowmore Point to Spanish Point and Islands SAC 001021. Version 1.
- (2014) Conservation Objectives: Inisheer Island SAC 001275. Version 1.
- (2018) Conservation Objectives for Kiltiernan Turlough SAC [001285]. Generic Version 6.0.
- (2018) Conservation Objectives for Termon Lough SAC [001321]. Generic Version 6.0.
- (2018) Conservation Objectives for East Burren Complex SAC [001926]. Generic Version 6.0.
- (2015) Conservation Objectives: Connemara Bog Complex SAC 002034. Version 1.
- (2018) Conservation Objectives for Lough Coy SAC [002117]. Generic Version 6.0.
- (2012) Conservation Objectives: Lower River Shannon SAC 002165. Version 1.0.
- (2018) Conservation Objectives for Gortacarnaun Wood SAC [002180]. Generic Version 6.0.
- (2018) Conservation Objectives for Drummin Wood SAC [002181]. Generic Version 6.0.
- (2019) Conservation Objectives: Ardrahan Grassland SAC 002244. Version 1.
- (2018) Conservation Objectives: Old Farm Buildings, Ballymacrogan SAC 002245. Version 1.
- (2018) Conservation Objectives: Ballycullinan, Old Domestic Building SAC 002246. Version 1.
- (2018) Conservation Objectives: Toonagh Estate SAC 002247. Version 1.
- (2014) Conservation Objectives: Carrowmore Dunes SAC 002250. Version 1.
- (2018) Conservation Objectives for Carrowbaun, Newhall and Ballylee Turloughs SAC [002293]. Generic Version 6.0.
- (2018) Conservation Objectives for Cahermore Turlough SAC [002294]. Generic Version 6.0.
- (2018) Conservation Objectives for Ballinduff Turlough SAC [002295]. Generic Version 6.0.
- (2018) Conservation Objectives for Cregg House Stables, Crusheen SAC [002317]. Generic Version 6.0.
- (2018) Conservation Objectives for Cliffs of Moher SPA [004005]. Generic Version 6.0.
- (2013) Conservation Objectives: Inner Galway Bay SPA 004031. Version 1.
- (2018) Conservation Objectives for Lough Corrib SPA [004042]. Generic Version 6.0
- (2018) Conservation Objectives for Cregganna Marsh SPA [004142]. Generic Version 6.0.
- (2018) Conservation Objectives for Slieve Aughty Mountains SPA [004168]. Generic Version 6.0.
- (2018) Conservation Objectives for Connemara Bog Complex SPA [004181]. Generic Version 6.0.
- (2014) Conservation Objectives: Mid-Clare Coast SPA 004182. Version 1.
- (2018) Conservation Objectives for Corofin Wetlands SPA [004220]. Generic Version 6.0.

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

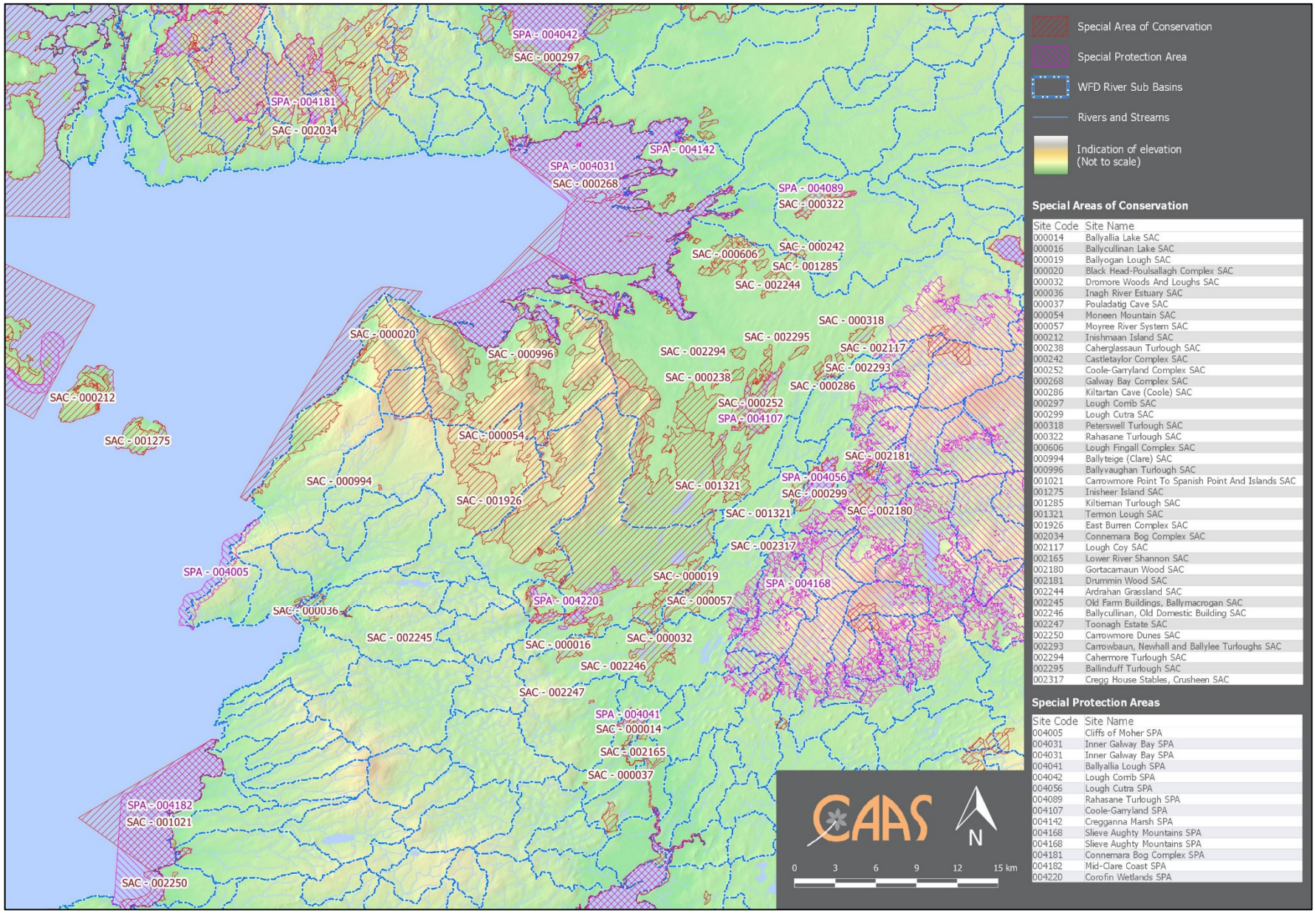

Figure 3.1 European sites within 15km of the VEDP boundary[5]

[5] Source: NPWS (datasets downloaded June 2019)

3.3 Assessment Criteria and Screening

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

The overarching objective of the VEDP is not the nature conservation management of the sites, but to support the ongoing tourism development of the Burren and Cliffs of Moher area, evolving from visitor attraction to a year-round tourism destination. Therefore, the VEDP is not considered to be directly connected with or necessary to the management of European Sites.

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

The **key objectives** of the Burren and Cliffs of Moher VEDP are to develop hero, supporting and ancillary experiences for the region that will:

- Motivate visitors to stay longer and spend more;
- Extend the length of the season;
- Align to relevant brand, target markets and segments;
- Sustain and increase job creation in the local area; and
- Protect the special environmental character of the region.

It is the **aim** of the VEDP to:

- Encourage and engage businesses and local partners;
- Maintain business engagement beyond the project lifetime; and
- Build lasting links between national partners and local tourism experiences.

Central to the VEDP is the **Action Plan** that arranges various **recommendations** (including nine **Catalyst Projects** and **other Actions**) under seven **Hero Experiences** and four **Enablers of Success**. Further information on the Plan, including its Action Plan is provided under Section 2.

Within each of the Hero Experiences the VEDP identifies 'hero products and places' 'supporting experiences', 'recommendations' and 'enablers of success'. VEDP experiences and products, increased visitor numbers, an increased dwell time and a broader seasonal spread each have the potential to encourage visitors to unmanaged or mismanaged European Sites that may be vulnerable to increased recreational activity and amenity use has the potential to encouraged visitors to these sites and introduce effects. The nature and scale of these effects vary depending on the nature of the tourist enterprise and the location of their operation.

Increased levels of tourism may lead to development such as renovation work to existing structures or construction of new infrastructure such as carparks etc. However, the Plan does not provide consent, establish a framework for granting consent or contribute towards a framework for granting consent. In order to be realised, projects included in the Plan (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework, of which the Plan is not part and does not contribute towards.

Increased visitor numbers to the Burren and Cliffs of Moher area will also influence capacities associated with waste water and drinking water services.

3.3.3 Characterising Visitor Interactions at Tourist Destinations

Fáilte Ireland regularly engages with environmental research that is used to make informed management decisions and produce robust guidelines to facilitate the protection of the environment. From its inception in 2014, the Wild Atlantic Way (WAW) Operational Programme Monitoring Programme (undertaken to date by CAAS on behalf of Fáilte Ireland guided by relevant stakeholders) has been conducting research into the impacts of tourism on the receiving environment. To date the surveys have covered 43 sites and monitored the activities and effects of over 20,000 visitors to WAW discovery points.

This data was reviewed to inform the AA process to identify and characterise potential effects and interactions from tourists along the WAW. It is assumed that visitor interactions within the VEDP area will be consistent with the trends, activities and effects recorded in this dataset.

This research characterises visitor movements at each site while examining the ecological features and sensitives present. A detailed assessment of the site facilities and management actions on site is also undertaken. From this data, impacts to ecological features are quantified in a systematic way and management recommendations are made. Over the first 4 years of the monitoring, the data has shown that visitors themselves cause low level effects, and high-level effects are predominantly caused by the mismanagement of sites. As well as the site-specific data being collected, the monitoring program collates and interprets existing national environmental indicator data compiling the results into annual macro monitoring reports. The WAW monitoring research is guided by an independent working group which steers the research and develops the program as the data is collected. This working group comprises of members from the EPA, NPWS, the Environmental Pillar and a representative from each of the County Councils along the WAW.

Each year the results are refined and published online in the form of Visitor Observation Reports, Ecological Impact Reports and the Macro Monitoring Reports. The reports are then dissected and detailed reports containing all relevant site-specific information are sent to each of the County Councils along the WAW; as well as any site management teams at sites not under the management of the County Council. This ensures that the research can be harnessed on site by those responsible while contributing towards informed management plans and guidelines created by Fáilte.

This extensive database demonstrates that over 85% of visitors observed at WAW discovery points are having low or no effects on the ecological features or processes at these sites. Ecological impacts observed comprise:

- Destruction of structures, vegetation or fauna;
- Trampling of herbaceous vegetation;
- Disturbance of wildlife;
- Heavy littering or dumping quantities of waste;
- Addition/alteration of site features, transient emissions, noise;
- Harvesting of large quantities of shells from beach sites;
- Fishing activities;
- Removal and throwing of large rocks; and
- Unrestricted dogs causing disturbances to wildlife.

The Monitoring Programme has identified that dunes, machair, maritime grasslands and upland habitats such as heathlands are the most sensitive/vulnerable to visitor effects. Therefore, the management of visitor movements within these habitats is key for the avoidance of potential effects.

3.3.4 Screening of Sites

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

- Where it can be shown that there are significant pathways such as hydrological links VEDP proposals and the site to be screened;
- Where the site is located at such a distance from that area to which the VEDP relates that effects are not foreseen; and
- Where it is that known threats or vulnerabilities at a site cannot be linked to potential impacts that may arise from the VEDP.

Table 3.1 Screening of European sites within 15km of the VEDP boundary

Site Name	**Site Code**	**Distance** (km)	**Qualifying Features** (Qualifying Interests and Special Conservation Interests)	**Potential effects** (refer also to Sections 3.3.2 and 3.3.3 above)	**Pathway for Significant Effects**	**Potential for In-Combination Effects**
000020	Black Head-Poulsallagh Complex SAC	Within	Reefs [1170] Perennial vegetation of stony banks [1220] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210] Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) [6510] Petrifying springs with tufa formation (Cratoneurion) [7220] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] *Petalophyllum ralfsii* (Petalwort) [1395]	The QIs for the SAC are sensitive to potential the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site Sources for effects from visitor movements that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.	Yes	Yes
000036	Inagh River Estuary SAC	Within	Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330] Mediterranean salt meadows *(Juncetalia maritimi)* [1410] Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	The QIs for the SAC are sensitive to potential effects such as direct disturbance, compaction of substrate, the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site Sources for effects from visitor movements that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.	Yes	Yes
000054	Moneen Mountain SAC	Within	Turloughs [3180] Alpine and Boreal heaths [4060] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Petrifying springs with tufa formation *(Cratoneurion)* [7220] Limestone pavements [8240] *Euphydryas aurinia* (Marsh Fritillary) [1065] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the SAC are sensitive to potential the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site Sources for effects from visitor movements that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.	Yes	Yes
000268	Galway Bay Complex SAC	Within	Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220]	The QIs for the SAC are sensitive to potential effects such as direct disturbance, compaction of substrate, groundwater interaction, interactions with marine trophic structures, the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement	Yes	Yes

			Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae)* [1330] Mediterranean salt meadows *(Juncetalia maritimi)* [1410] Turloughs [3180] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] Alkaline fens [7230] Limestone pavements [8240] *Lutra lutra* (Otter) [1355] *Phoca vitulina* (Harbour Seal) [1365]	of visitors at a site Sources for effects from visitor movements that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.		
000994	Ballyteige (Clare) SAC	Within	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	The QIs for the SAC are sensitive to potential effects such as compaction of substrate, and the trampling/destruction of vegetation. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site Sources for effects from visitor movements that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise;	Yes	Yes
000996	Ballyvaughan Turlough SAC	Within	Turloughs [3180]	The QIs for the SAC are sensitive to potential effects such as interactions with groundwater, compaction of substrate, and the trampling/destruction of vegetation. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site Sources for effects from visitor movements that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Heavy littering or dumping quantities of waste; and • Addition/alteration of site features, transient emissions, noise;	Yes	Yes
001926	East Burren Complex SAC	Within	Hard oligo-mesotrophic waters with *benthic vegetation of Chara spp.* [3140] Turloughs [3180] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the *Violetalia calaminariae* [6130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Lowland hay meadows *(Alopecurus pratensis, Sanguisorba officinalis)* [6510] Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] Petrifying springs with tufa formation *(Cratoneurion)* [7220] Alkaline fens [7230] Limestone pavements [8240] Caves not open to the public [8310]	The QIs for the SAC are sensitive to potential effects such as direct disturbance, compaction of substrate, groundwater interaction, interactions with aquatic trophic structures, the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site Sources for effects from visitor movements that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.	Yes	Yes

			Alluvial forests with *Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* [91E0] *Euphydryas aurinia* (Marsh Fritillary) [1065] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303] *Lutra lutra* (Otter) [1355]			
004005	Cliffs of Moher SPA	Within	Fulmar *(Fulmarus glacialis)* [A009] Kittiwake *(Rissa tridactyla)* [A188] Guillemot *(Uria aalge*) [A199] Razorbill *(Alca torda)* [A200] Puffin *(Fratercula arctica)* [A204] Chough *(Pyrrhocorax pyrrhocorax*) [A346]	The SCIs for the SPA are sensitive to potential effects such as direct disturbance and noise pollution issues. Sources for effects that could impact upon the SCIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.	Yes	Yes
004031	Inner Galway Bay SPA	Within	Great Northern Diver *(Gavia immer)* [A003] Cormorant *(Phalacrocorax carbo)* [A017] Grey Heron *(Ardea cinerea)* [A028] Light-bellied Brent Goose *(Branta bernicla hrota)* [A046] Wigeon *(Anas penelope)* [A050] Teal *(Anas crecca)* [A052] Shoveler *(Anas clypeata)* [A056] Red-breasted Merganser *(Mergus serrator)* [A069] Ringed Plover *(Charadrius hiaticula)* [A137] Golden Plover *(Pluvialis apricaria)* [A140] Lapwing *(Vanellus vanellus)* [A142] Dunlin *(Calidris alpina*) [A149] Bar-tailed Godwit *(Limosa lapponica*) [A157] Curlew *(Numenius arquata)* [A160] Redshank *(Tringa totanus)* [A162] Turnstone *(Arenaria interpres)* [A169] Black-headed Gull *(Chroicocephalus ridibundus)* [A179] Common Gull *(Larus canus)* [A182] Sandwich Tern *(Sterna sandvicensis)* [A191] Common Tern *(Sterna hirundo)* [A193] Wetland and Waterbirds [A999]	The SCIs for the SPA are sensitive to potential effects such as direct disturbance and noise pollution issues. Sources for effects that could impact upon the SCIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.	Yes	Yes
004220	Corofin Wetlands SPA	Within	Little Grebe *(Tachybaptus ruficollis)* [A004] Whooper Swan *(Cygnus cygnus)* [A038] Wigeon *(Anas penelope)* [A050] Teal *(Anas crecca)* [A052] Black-tailed Godwit *(Limosa limosa)* [A156] Wetland and Waterbirds [A999]	The SCIs for the SPA are sensitive to potential effects such as direct disturbance and noise pollution issues. Sources for effects that could impact upon the SCIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife.	Yes	Yes
000238	Caherglassaun Turlough SAC	1.92	Turloughs [3180] Rivers with muddy banks *with Chenopodion rubri p.p. and Bidention p.p. vegetation* [3270] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. Interactions with water quality and characteristics as well as light pollution and availability of roosting resources etc. There are no sources for ground water interactions within the VEDP. The Lesser horseshoe bat has a known distribution around the roost of 4.2km and therefore there are pathways for potential effects due to visitor movements within the Burren area. Sources for effects that could impact upon the QIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife	Yes	Yes
002294	Cahermore Turlough SAC	3.03	Turloughs [3180]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No

001021	Carrowmore Point To Spanish Point And Islands SAC	3.48	Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Petrifying springs with tufa formation *(Cratoneurion)* [7220]	The QIs for the site are sensitive to hydrological interactions including groundwater and alteration to community dynamics. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
004182	Mid-Clare Coast SPA	3.51	Cormorant *(Phalacrocorax carbo)* [A017] Barnacle Goose *(Branta leucopsis)* [A045] Ringed Plover *(Charadrius hiaticula)* [A137] Sanderling *(Calidris alba)* [A144] Purple Sandpiper *(Calidris maritima)* [A148] Dunlin *(Calidris alpina)* [A149] Turnstone *(Arenaria interpres)* [A169] Wetland and Waterbirds [A999]	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
000252	Coole-Garryland Complex SAC	4.14	Natural eutrophic lakes with *Magnopotamion or Hydrocharition* - type vegetation [3150] Turloughs [3180] Rivers with muddy banks with *Chenopodion rubri p.p. and Bidention p.p. vegetation* [3270] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Limestone pavements [8240] *Taxus baccata* woods of the British Isles [91J0]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
000016	Ballycullinan Lake SAC	4.28	Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
004107	Coole-Garryland SPA	4.30	Whooper Swan *(Cygnus cygnus)* [A038]	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
002244	Ardrahan Grassland SAC	5.31	Alpine and Boreal heaths [4060] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Limestone pavements [8240]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
001285	Kiltiernan Turlough SAC	5.83	Turloughs [3180]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
002246	Ballycullinan, Old Domestic Building SAC	5.93	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, light pollution, habitat fragmentation and/or destruction of vegetation. The species has a known distribution around the roost of 4.2 km. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
001321	Termon Lough SAC	6.00	Turloughs [3180]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No

000032	Dromore Woods And Loughs SAC	6.19	Natural eutrophic lakes with *Magnopotamion or Hydrocharition* - type vegetation [3150] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Limestone pavements [8240] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303] *Lutra lutra* (Otter) [1355]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
000019	Ballyogan Lough SAC	6.66	Calcareous fens with Cladium mariscus and species of *the Caricion davallianae* [7210]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
002245	Old Farm Buildings, Ballymacrogan SAC	7.24	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, light pollution, habitat fragmentation and/or destruction of vegetation. The species has a known distribution around the roost of 4.2 km. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
002295	Ballinduff Turlough SAC	7.36	Turloughs [3180]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
001275	Inisheer Island SAC	7.41	Coastal lagoons [1150] Reefs [1170] European dry heaths [4030] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Lowland hay meadows *(Alopecurus pratensis, Sanguisorba officinalis)* [6510] Limestone pavements [8240]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
000286	Kiltartan Cave (Coole) SAC	7.45	Caves not open to the public [8310] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, light pollution, habitat fragmentation and/or destruction of vegetation. The species has a known distribution around the roost of 4.2 km. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
000242	Castletaylor Complex SAC	7.94	Turloughs [3180] Alpine and Boreal heaths [4060] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Limestone pavements [8240]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
000057	Moyree River System SAC	7.97	Water courses of plain to montane levels with the Ranunculion fluitantis and *Callitricho-Batrachion* vegetation [3260] Alkaline fens [7230] Limestone pavements [8240] Caves not open to the public [8310] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303] *Lutra lutra* (Otter) [1355]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No

004142	Cregganna Marsh SPA	8.00	Greenland White-fronted Goose *(Anser albifrons flavirostris)* [A395]	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
002247	Toonagh Estate SAC	9.17	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, light pollution, habitat fragmentation and/or destruction of vegetation. The species has a known distribution around the roost of 4.2 km. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
002293	Carrowbaun, Newhall and Ballylee Turloughs SAC	9.29	Turloughs [3180]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
000299	Lough Cutra SAC	10.26	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, light pollution, habitat fragmentation and/or destruction of vegetation. The species has a known distribution around the roost of 4.2 km. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
000322	Rahasane Turlough SAC	10.55	Turloughs [3180]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
004089	Rahasane Turlough SPA	10.55	Whooper Swan *(Cygnus cygnus)* [A038] Wigeon (*Anas penelope)* [A050] Golden Plover *(Pluvialis apricaria)* [A140] Black-tailed Godwit *(Limosa limosa)* [A156] Greenland White-fronted Goose *(Anser albifrons flavirostris*) [A395] Wetland and Waterbirds [A999]	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
002117	Lough Coy SAC	10.60	Turloughs [3180]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
002317	Cregg House Stables, Crusheen SAC	10.82	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, light pollution, habitat fragmentation and/or destruction of vegetation. The species has a known distribution around the roost of 4.2 km. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
004168	Slieve Aughty Mountains SPA	11.06	Hen Harrier *(Circus cyaneus)* [A082] Merlin *(Falco columbarius)* [A098]	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
004056	Lough Cutra SPA	11.19	Cormorant *(Phalacrocorax carbo)* [A017]	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
000297	Lough Corrib SAC	11.27	Coastal lagoons [1150] Reefs [1170] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Natural dystrophic lakes and ponds [3160]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No

			Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Euphydryas aurinia (Marsh Fritillary) [1065] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Najas flexilis (Slender Naiad) [1833]			
000318	Peterswell Turlough SAC	11.43	Turloughs [3180] Rivers with muddy banks with *Chenopodion rubri p.p. and Bidention p.p. vegetation* [3270]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
000014	Ballyallia Lake SAC	11.45	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation [3150]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
004041	Ballyallia Lough SPA	11.45	Wigeon *(Anas penelope)* [A050] Gadwall *(Anas strepera)* [A051] Teal *(Anas crecca)* [A052] Mallard *(Anas platyrhynchos)* [A053] Shoveler *(Anas clypeata)* [A056] Coot *(Fulica atra)* [A125] Black-tailed Godwit *(Limosa limosa)* [A156] Wetland and Waterbirds [A999]	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
002034	Connemara Bog Complex SAC	11.86	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No

			Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230] Limestone pavements [8240] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Bog woodland [91D0] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Drepanocladus vernicosus (Slender Green Feather-moss) [1393] Najas flexilis (Slender Naiad) [1833]			
000212	Inishmaan Island SAC	12.62	Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Machairs (* in Ireland) [21A0] European dry heaths [4030] Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210] Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) [6510] Limestone pavements [8240]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
002165	Lower River Shannon SAC	12.87	Sandbanks which are slightly covered by sea water all the time [1110] Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330] Mediterranean salt meadows *(Juncetalia maritimi) [1410]* Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No

			Alluvial forests with *Alnus glutinosa and Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0] *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029] *Petromyzon marinus* (Sea Lamprey) [1095] *Lampetra planeri* (Brook Lamprey) [1096] *Lampetra fluviatilis* (River Lamprey) [1099] *Salmo salar* (Salmon) [1106] *Tursiops truncates* (Common Bottlenose Dolphin) [1349] *Lutra lutra* (Otter) [1355]			
004181	Connemara Bog Complex SPA	13.53	*Cormorant (Phalacrocorax carbo) [A017]* Merlin *(Falco columbarius) [A098]* Golden Plover *(Pluvialis apricaria) [A140]* Common Gull *(Larus canus) [A182]*	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No
002250	Carrowmore Dunes SAC	13.67	Reefs [1170] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]	The QIs for the site are sensitive to hydrological interactions including groundwater, land use management and alteration to community dynamics etc. The VEDP does not provide for any development, it aims to increase the regionality and seasonality of existing and future tourism in the Burren area. There are a number of plans and programs that provide for increasing visitor numbers in the Burren area such as the Clare CDP, the Burren Discovery Trail, Fáilte Ireland's 10-year vision/5-year strategy 2018-2023 and the WAW Operational Programme. All projects that arise as a result of the VEDP must comply with the Clare County Development (CDP) as well as all relevant local area plan provisions. The sources for effects identified look at visitor interactions at a local level. Due to the distance these sources are not present; therefore, no further consideration is required.	No	No
000037	Pouladatig Cave SAC	13.84	Caves not open to the public [8310] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, light pollution, habitat fragmentation and/or destruction of vegetation. The species has a known distribution around the roost of 4.2 km. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
002180	Gortacarnaun Wood SAC	14.41	Old sessile oak woods with *Ilex and Blechnum* in the British Isles [91A0]	The QIs for the site are sensitive to local effects such as direct land use management, direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
002181	Drummin Wood SAC	14.58	Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]	The QIs for the site are sensitive to ground water interactions and local effects such as direct disturbance, trampling and/or destruction of vegetation. There are no sources for ground water interactions within the VEDP. The distances between Burren and Cliffs of Moher and the European site mean that there are no pathways for effects and therefore, no further consideration is required.	No	No
004042	Lough Corrib SPA	14.93	Gadwall *(Anas strepera) [A051]* Shoveler *(Anas clypeata) [A056]* Pochard *(Aythya ferina) [A059]* Tufted Duck *(Aythya fuligula) [A061]* Common Scoter *(Melanitta nigra) [A065]* Hen Harrier *(Circus cyaneus) [A082]* Coot *(Fulica atra) [A125]* Golden Plover *(Pluvialis apricaria) [A140]* Black-headed Gull *(Chroicocephalus ridibundus) [A179]* Common Gull *(Larus canus) [A182]* Common Tern *(Sterna hirundo) [A193]* Arctic Tern *(Sterna paradisaea) [A194]* Greenland White-fronted Goose *(Anser albifrons flavirostris) [A395]* Wetland and Waterbirds *[A999]*	The SCIs for the site are sensitive to local effects such as direct disturbance and/or noise pollution. Given the distances between Burren and Cliffs of Moher and the European Site there are no pathways for effects identified and, therefore, no further consideration is required.	No	No

3.4 Other Plans and Programmes

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or programmes that might, in combination with the plan or project, have the potential to adversely impact upon European Sites. Appendix II outlines a selection of plans or projects that may interact with the VEDP to cause in-combination effects to European sites such as the Tourism Action Plan 2016-2018. These plans and programmes were considered throughout the assessment.

In order to be realised, projects included in the Plan (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework, of which the Plan is not part and does not contribute towards.

The National Planning Framework (NPF) sets out Ireland's planning policy direction for the next 22 years. The NPF is to be implemented through Regional Spatial and Economic Strategies (RSESs) and lower tier Development Plans and Local Area Plans. The RSESs for both the Southern Region and the Northern and Western Region set out objectives relating tourism development, that have been subject to environmental assessment, including those relating to: enhancing provision of tourism and leisure amenity; promoting tourism activity; developing a road network and public transport services, facilitating improved visitor access and longer dwell times; developing walking and cycling trails, opening greater accessibility to the marine and countryside environment by sustainable modes; and facilitating appropriate tourism development, including that relating to greenways, blueways and peatlands. When adopted, the RSESs will inform the review of existing, assessed Development Plans and Local Area Plans, which already include various provisions relating to land use, tourism and infrastructure. Such reviews will also be subject to environmental assessments.

It is recognised that the identification of in-combination effects is limited, and that, as is normal practice, the assessment of in-combination effects will need to be undertaken in a more comprehensive manner at project-level.

Additional information on the relationship with other plans and programmes is provided at Appendix II.

3.5 AA Screening Conclusion

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

- Is not directly connected with or necessary to the management of any European site; and
- May, if unmitigated, have significant adverse effects on 11 (no.) European sites.

Therefore, a Stage 2 AA is required for the VEDP (see Section 4 of this report). An Ancillary AA determination is provided at Figure 3.2.

Ancillary AA determination, further to the main AA Natura Impact Statement

under the
European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended)
for the
Burren and Cliffs of Moher Visitor Experience Development Plan

Appropriate Assessment (AA) screening

This ancillary determination is ancillary to both:

- Fáilte Ireland's AA Natura Impact Statement; and
- Fáilte Ireland's AA determination that is made in advance of finalisation of the Burren and Cliffs of Moher Visitor Experience Development Plan.

In making the determination that AA is required, the information on the potential effects on European Sites arising from the Burren and Cliffs of Moher Visitor Experience Development Plan is taken into account (this information is reproduced in the AA Natura Impact Statement).

That information has been carefully considered and its reasoning and conclusion agreed with and adopted – allowing the AA Natura Impact Statement to conclude at the end of Section 3 "Screening for Appropriate Assessment" of the Natura Impact Statement that Stage 2 AA is required. It has been determined that the Burren and Cliffs of Moher Visitor Experience Development Plan may have effects on a number of European Sites - therefore, Stage 2 AA (including the preparation of the Natura Impact Statement) is required for the Scheme (see Natura Impact Statement subsection 3.5 "AA Screening Conclusion").

Signed:
Signatory
Approved Officer

Figure 3.2 Ancillary AA Determination

Section 4 Stage 2 Appropriate Assessment

4.1 Introduction

The Stage 2 AA assesses whether the Plan alone, or in-combination with other plans, programmes, and/or projects, would result in adverse impacts on the integrity of the 11 European Sites brought forward from screening (see Table 3.1), with respect to site structure, function and/or conservation objectives.

4.2 Characterisation of European sites Potentially Affected

The AA Screening identified 11 European Sites with pathway receptors for potential effects arising from the implementation of the VEDP (see Section 2).

Appendix I characterises each of the qualifying features of the 11 European Sites brought forward from Stage 1 in context of each of the sites' vulnerabilities. Each of these site characterisations were taken from the NPWS website[6].

4.3 Identifying and Characterising Potential Significant Effets

The following parameters are described when characterising impacts[7]:

Direct and Indirect Impacts - An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.

Magnitude - Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.

Extent - The area over which the impact occurs – this should be predicted in a quantified manner.

Duration - The time for which the effect is expected to last prior to recovery or replacement of the resource or feature.

- Temporary: Up to 1 Year;
- Short Term: The effects would take 1-7 years to be mitigated;
- Medium Term: The effects would take 7-15 years to be mitigated;
- Long Term: The effects would take 15-60 years to be mitigated; and
- Permanent: The effects would take 60+ years to be mitigated.

Likelihood – The probability of the effect occurring taking into account all available information.

- Certain/Near Certain: >95% chance of occurring as predicted;
- Probable: 50-95% chance as occurring as predicted;
- Unlikely: 5-50% chance as occurring as predicted; and
- Extremely Unlikely: <5% chance as occurring as predicted.

Ecologically Significant Impact - An impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area.

Integrity of a Site - The coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

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

SSCOs have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable

[6] last accessed 8th August 2019; https://www.npws.ie/protected-sites

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

condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

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

Generic Conservation Objective for cSACs:

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

One generic Conservation Objective for SPAs:

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

4.3.1 Types of Potential Effects

Assessment of potential impacts on European Sites is conducted utilising a standard source-pathway model (see approach referred to under Sections 1.3 and 3).

The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Loss/reduction of habitat area;
- Habitat or species fragmentation;
- Disturbance to key species;
- Reduction in species density;
- Changes in key indicators of conservation value (water quality etc.); and
- Climate change.

Each of these potential changes are considered below and in Table 4.1 with reference to the QIs/SCIs of all of the European Sites brought forward from Stage 1 of the AA process (see Section 3).

4.3.1.1 Loss/Reduction of Habitat Area

Implementing the Plan will involve Fáilte Ireland helping to facilitate, promote, support and coordinate stakeholders (including local authorities, other government agencies, tourism operators, communities and visitors) in their activities in a way that is consistent with existing and emerging plans that have been subject to environmental assessment. The Plan does not provide consent, establish a framework for granting consent or contribute towards a framework for granting consent.

Fáilte Ireland provides funding for sustainable tourism projects that emerge as part of specific, competitive, themed and time-bound grant schemes or as part of wider strategic partnerships. These include projects relating to land use, infrastructural development and land use activities and attractions. Reference made to such projects included in the Plan does not guarantee funding. While funding is provided to certain projects, Fáilte Ireland is not the developer.

Tourism experiences supported by the VEDP are managed independently to Fáilte Ireland and therefore there is a risk of habitat loss or reduction due to the implementation of the Plan. Habitat destruction could occur at unmanaged/mismanaged sites or through inadequate operating procedures of strategic partners that are promoted by the VEDP.

Taking into account all of the above, mitigation measures are included in the VEDP (see Section 5), e.g. in order to achieve funding (including promotion) for land use or infrastructural development or land use activities from Fáilte Ireland, Fáilte Ireland's stakeholders shall be required to demonstrate compliance[8] with measures relating to sustainable development, environmental protection and environmental management contained within the following Fáilte Ireland published documents:

[8] Demonstration of compliance may be supported by monitoring undertaken by the beneficiary.

- Wild Atlantic Way Operational Programme Appendix 5 *"Site Maintenance Guidelines"* and other relevant measures from the Fáilte Ireland visitor and habitat management guidelines series; and
- Wild Atlantic Way Operational Programme Appendix 6 "Environmental Management for Local Authorities and Others".

4.3.1.2 Habitat or species Fragmentation

All the European Sites within the Burren and Cliffs of Moher VEDP area are coastal, except for the Moneen Mountain SAC and the East Burren SAC.

Visitor interactions and activities at Discovery Points have the potential to result in the following effects:

- Destruction of structures, vegetation or fauna;
- Trampling of herbaceous vegetation;
- Disturbance of wildlife;
- Heavy littering or dumping quantities of waste;
- Addition/alteration of site features, transient emissions, noise;
- Harvesting of large quantities of shells from beach sites;
- Fishing activities;
- Removal and throwing of large rocks; and
- Unrestricted dogs causing disturbances to wildlife.

These sources for effects are localised and small scale; however, if unmanaged, the provisions to increase tourist numbers to the Burren and Cliffs of Moher area could result in habitat loss (as indicated above) which could affect the connectivity of habitats and species populations.

Fáilte Ireland provides funding for sustainable tourism projects that emerge as part of specific, competitive, themed and time-bound grant schemes or as part of wider strategic partnerships. These include projects relating to land use, infrastructural development and land use activities and attractions. Reference made to such projects included in the Plan does not guarantee funding. While funding is provided to certain projects, Fáilte Ireland is not the developer.

Taking into account all of the above, mitigation measures are included in the VEDP (see Section 5), e.g. in order to achieve funding (including promotion) for land use or infrastructural development or land use activities from Fáilte Ireland, Fáilte Ireland's stakeholders shall be required to demonstrate compliance[9] with measures relating to sustainable development, environmental protection and environmental management contained within the following Fáilte Ireland published documents:

- Wild Atlantic Way Operational Programme Appendix 5 *"Site Maintenance Guidelines"* and other relevant measures from the Fáilte Ireland visitor and habitat management guidelines series; and
- Wild Atlantic Way Operational Programme Appendix 6 "Environmental Management for Local Authorities and Others".

4.3.1.3 Disturbance to Key Species

Visitor movement patterns and activities on site can introduce direct and indirect disturbance effects to designated species. Similarly, potential disturbance effects could occur during construction at a destination. These effects are dependent on on-site management practices, visitor behaviours and the operational procedures of strategic partners.

Fáilte Ireland provides funding for sustainable tourism projects that emerge as part of specific, competitive, themed and time-bound grant schemes or as part of wider strategic partnerships. These include projects relating to land use, infrastructural development and land use activities and attractions. Reference made to such projects included in the Plan does not guarantee funding. While funding is provided to certain projects, Fáilte Ireland is not the developer.

Taking into account all of the above, mitigation measures are included in the VEDP (see Section 5), e.g. in order to achieve funding (including promotion) for land use or infrastructural development or land use activities from Fáilte Ireland, Fáilte Ireland's stakeholders shall be required to demonstrate compliance[10] with measures relating to sustainable development, environmental protection and environmental management contained within the following Fáilte Ireland published documents:

[9] Demonstration of compliance may be supported by monitoring undertaken by the beneficiary.
[10] Demonstration of compliance may be supported by monitoring undertaken by the beneficiary.

- Wild Atlantic Way Operational Programme Appendix 5 *"Site Maintenance Guidelines"* and other relevant measures from the Fáilte Ireland visitor and habitat management guidelines series; and
- Wild Atlantic Way Operational Programme Appendix 6 "Environmental Management for Local Authorities and Others".

4.3.1.4 Reduction in species density

Visitor movement patterns and activities on site can introduce direct and indirect disturbance effects to designated species. These effects can influence the ranging behaviours of species over time and therefore influence the density of species at a local level. These effects are dependent on on-site management practices, visitor behaviours and the operational procedures of strategic partners.

Fáilte Ireland provides funding for sustainable tourism projects that emerge as part of specific, competitive, themed and time-bound grant schemes or as part of wider strategic partnerships. These include projects relating to land use, infrastructural development and land use activities and attractions. Reference made to such projects included in the Plan does not guarantee funding. While funding is provided to certain projects, Fáilte Ireland is not the developer.

Taking into account all of the above, mitigation measures are included in the VEDP (see Section 5), e.g. in order to achieve funding (including promotion) for land use or infrastructural development or land use activities from Fáilte Ireland, Fáilte Ireland's stakeholders shall be required to demonstrate compliance[11] with measures relating to sustainable development, environmental protection and environmental management contained within the following Fáilte Ireland published documents:

- Wild Atlantic Way Operational Programme Appendix 5 *"Site Maintenance Guidelines"* and other relevant measures from the Fáilte Ireland visitor and habitat management guidelines series; and
- Wild Atlantic Way Operational Programme Appendix 6 "Environmental Management for Local Authorities and Others".

4.3.1.5 Changes of Indicators of Conservation Value

Changes in key indicators of conservation value may arise through vectors such as decreases in water quality / quantity (e.g. through inadequate wastewater treatment, run-off of pollutants during construction and operation of developments, agricultural runoff). However, the Plan does not provide consent, establish a framework for granting consent or contribute towards a framework for granting consent. Implementing the Plan will involve Fáilte Ireland helping to facilitate, promote, support and coordinate stakeholders (including local authorities, other government agencies, tourism operators, communities and visitors) in their activities in a way that is consistent with existing and emerging plans that have been subject to environmental assessment.

Fáilte Ireland provides funding for sustainable tourism projects that emerge as part of specific, competitive, themed and time-bound grant schemes or as part of wider strategic partnerships. These include projects relating to land use, infrastructural development and land use activities and attractions. Reference made to such projects included in the Plan does not guarantee funding. While funding is provided to certain projects, Fáilte Ireland is not the developer.

The VEDP aims to increase visitor numbers within the Burren and Cliffs of Moher area as well as extend the dwell time and seasonal spread of visitors. The key elements of the Plan that have been identified to have potential effects (see Section 3.3.2) are due to the promotion of tourism and the direct effects of tourism on the receiving environment at a local level. These potential effects are influenced by on-site management practices, visitor behaviours and the operational procedures of strategic partners.

Taking into account all of the above, mitigation measures are included in the VEDP (see Section 5), e.g. in order to achieve funding (including promotion) for land use or infrastructural development or land use activities from Fáilte Ireland, Fáilte Ireland's stakeholders shall be required to demonstrate compliance[12] with measures relating to sustainable development, environmental protection and environmental management contained within the following Fáilte Ireland published documents:

- Wild Atlantic Way Operational Programme Appendix 5 *"Site Maintenance Guidelines"* and other relevant measures from the Fáilte Ireland visitor and habitat management guidelines series; and

[11] Demonstration of compliance may be supported by monitoring undertaken by the beneficiary.
[12] Demonstration of compliance may be supported by monitoring undertaken by the beneficiary.

- Wild Atlantic Way Operational Programme Appendix 6 "Environmental Management for Local Authorities and Others".

4.3.1.6 Climate change

Increases in tourist numbers will result in travel related greenhouse gas emissions to air. Such effects upon greenhouse gas emissions will not affect changes projected to arise from climate change to the degree that it would affect the QIs or SCIs of the European Sites considered.

Table 4.1 Characterisation of Potential Effects arising from the VEDP

Site Code	Site Name[13]	Characterisation of Potential Effects[14]
000020	Black Head-Poulsallagh Complex SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site. Sources for effects that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
000036	Inagh River Estuary SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as direct disturbance, compaction of substrate, the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site. Sources for effects that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
000054	Moneen Mountain SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site. Sources for effects that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
000268	Galway Bay Complex SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as direct disturbance, compaction of substrate, groundwater interaction, interactions with marine trophic structures, the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site. Sources for effects that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste;

[13] For distance from Plan boundary and qualifying features for each European Site (QIs and SCIs), please refer to Table 3.1.
[14] Informed by, inter alia, *The Status of Protected EU Habitats and Species in Ireland, Overview Volume 1* (NPWS, 2013)

Site Code	Site Name[13]	Characterisation of Potential Effects[14]
		• Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
000994	Ballyteige (Clare) SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as direct disturbance, compaction of substrate, groundwater interaction, interactions with marine trophic structures, the trampling/destruction of vegetation and potential interactions with water quality through dumping etc. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site. Sources for effects that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Harvesting of large quantities of shells from beach sites; • Fishing activities; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
000996	Ballyvaughan Turlough SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as compaction of substrate, and the trampling/destruction of vegetation. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site. Sources for effects that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Heavy littering or dumping quantities of waste; and • Addition/alteration of site features, transient emissions, noise. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
001926	East Burren Complex SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as compaction of substrate, and the trampling/destruction of vegetation. Increased levels of tourism could increase pressures such as pollution through the mismanagement of wastewater, inappropriate development and /or the mismanagement of visitors at a site. Sources for effects that could impact upon the QIs include: • Destruction of structures, vegetation or fauna; • Trampling of herbaceous vegetation; • Heavy littering or dumping quantities of waste; and • Addition/alteration of site features, transient emissions, noise. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
004005	Cliffs of Moher SPA	As identified on screening Table 3.1, the SCIs for the SPA are sensitive to potential effects such as direct disturbance and noise pollution issues. Sources for effects that could impact upon the SCIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.

Site Code	Site Name[13]	Characterisation of Potential Effects[14]
004031	Inner Galway Bay SPA	As identified on screening Table 3.1, the SCIs for the SPA are sensitive to potential effects such as direct disturbance and noise pollution issues. Sources for effects that could impact upon the SCIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
004220	Corofin Wetlands SPA	As identified on screening Table 3.1, the SCIs for the SPA are sensitive to potential effects such as direct disturbance and noise pollution issues. Sources for effects that could impact upon the SCIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife. Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.
000238	Caherglassaun Turlough SAC	As identified on screening Table 3.1, the QIs for the SAC are sensitive to potential effects such as direct disturbance, trampling and/or destruction of vegetation. Interactions with water quality and characteristics as well as light pollution and availability of roosting resources etc. There are no sources for ground water interactions within the VEDP. The Lesser horseshoe bat has a known distribution around the roost of 4.2km and therefore there are pathways for potential effects due to visitor movements within the Burren area. Sources for effects that could impact upon the QIs include: • Disturbance of wildlife; • Heavy littering or dumping quantities of waste; • Addition/alteration of site features, transient emissions, noise; • Removal and throwing of large rocks; and • Unrestricted dogs causing disturbances to wildlife Effects will be mitigated through demonstration of compliance with the measures detailed under Section 5.

Section 5 Mitigation Measures

The SEA and AA team worked with the Plan-preparation team at Fáilte Ireland in order to integrate requirements for environmental protection and management into the Plan.

Fáilte Ireland provides funding for sustainable tourism projects that emerge as part of specific, competitive, themed and time-bound grant schemes or as part of wider strategic partnerships. These include projects relating to land use, infrastructural development and land use activities and attractions. Reference made to such projects included in the Plan does not guarantee funding. While funding is provided to certain projects, Fáilte Ireland is not the developer.

In order to achieve funding (including promotion) for land use or infrastructural development or land use activities from Fáilte Ireland, Fáilte Ireland's stakeholders shall be required to demonstrate compliance[15] with measures relating to sustainable development, environmental protection and environmental management contained within the following Fáilte Ireland published documents:

- Wild Atlantic Way Operational Programme Appendix 5 *"Site Maintenance Guidelines"* and other relevant measures from the Fáilte Ireland visitor and habitat management guidelines series; and
- Wild Atlantic Way Operational Programme Appendix 6 "Environmental Management for Local Authorities and Others".

In order to be realised, projects included in the VEDP (in a similar way to other projects from any other sector) will have to comply, as relevant, with various legislation, policies, plans and programmes (including requirements for lower-tier Appropriate Assessment, Environmental Impact Assessment and other licencing requirements as appropriate) that form the statutory decision-making and consent-granting framework, of which the VEDP is not part and does not contribute towards. Such legislation, policies, plans and programmes include:

- Requirements for lower-tier environmental assessment, including EIA and AA;
- The Clare and Galway County Development Plans, include various provisions relating to sustainable development, environmental protection and environmental management; and
- The Climate Action Plan 2019, the National Climate Change Adaptation Framework (2018 and any subsequent versions) and the National Mitigation Plan (2017 and any subsequent versions).

Infrastructure Capacity

With respect to infrastructural capacity (including drinking water, wastewater, waste and transport) the potential impact on existing infrastructure as well as the potential environmental effects of a likely increase in tourism-related traffic volumes along any routes resulting from the relevant initiative shall be considered and mitigated as appropriate, where relevant. The promotion of developing visitor friendly infrastructure where it is required will also be encouraged.

Visitor Management

Those receiving funding shall seek to manage any increase in visitor numbers and/or any change in visitor behaviour in order to avoid significant effects including loss of habitat and disturbance, including ensuring that new projects are a suitable distance from ecological sensitivities.

Extensive research by Fáilte Ireland has shown improved environmental outcomes (including improved attainment of conservation objectives) in areas with visitor management strategies. Visitor management strategies will be required for proposed plans, programmes and projects that are to receive funding as relevant and appropriate.

Green Infrastructure and Ecosystem Services

Those receiving funding shall contribute towards the maintenance of existing green infrastructure and its ecosystem services, taking into account the output of the Mapping and Assessment of Ecosystem Services project being undertaken by the NPWS. Proposals for the development of any green

[15] Demonstration of compliance may be supported by monitoring undertaken by the beneficiary.

infrastructure should demonstrate the synergies that can be achieved with regard to the: provision of open space amenities; sustainable management of water; protection and management of biodiversity; protection of cultural heritage; and protection of protected landscape sensitivities.

Section 6 Conclusion

Stage 1 Screening and Stage 2 AA has been carried out. The implementation of the VEDP would have the potential to result in effects to the integrity of European Sites, if unmitigated.

The risks to the safeguarding and integrity of the QIs, SCIs and conservation objectives of the European sites have been addressed by the inclusion of mitigation measures that will prioritise the avoidance of effects in the first place and mitigate potential effects where these cannot be avoided. In addition, lower level plans, if any, and projects arising through the implementation of the VEDP will themselves be subject to their own AA/screening for AA processes, as relevant. Furthermore, in order to be realised, projects included in the VEDP will have to comply, as relevant, with the various provisions of legislation, policies, plans and programmes (including requirements for lower-tier AA) that form the statutory decision-making and consent-granting framework, of which the VEDP is not part and does not contribute towards.

In-combination effects from interactions with other plans and projects were considered in the assessment and the mitigation measures incorporated into the VEDP allow a conclusion to be arrived at that there will be no significant adverse effects as a result of the implementation of the VEDP either alone or in-combination with other plans/projects.

Having incorporated mitigation measures, it is concluded that the VEDP will not give rise to any effect on the ecological integrity of any European sites, alone or in combination with any other plans, programmes or projects[16]. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated.

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

Appendix I Background information on European Sites

List of European Sites within 15 km of the VEDP boundary; including the Qualifying features (Qualifying Interests or Special Conservation Interests) and Site Vulnerability/Sensitivity

Site Name	Site Code	Distance (km)	Qualifying Features (Qualifying Interests and Special Conservation Interests)	Site Description/Vulnerability
000020	Black Head-Poulsallagh Complex SAC	Within	Reefs [1170] Perennial vegetation of stony banks [1220] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210] Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) [6510] Petrifying springs with tufa formation (Cratoneurion) [7220] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] *Petalophyllum ralfsii* (Petalwort) [1395]	The Black Head-Poulsallagh complex encompasses a complete range of rocky Burren habitats from coastal, glacially planed limestone pavements to high level heaths. The Caher River, the only river found in the high Burren, and Fanore dunes, one of the best dune systems in Clare, are included in the site. The shoreline, littoral and sublittoral areas are also interesting because of the rock type, physical exposure, and flora and fauna communities. The NPWS have identified that Leisure activities, including the construction of a caravan park, in the Fanore area has led to erosion and a deterioration of the quality of the dune area. Similarly, Scrub clearance and intensification of agriculture has caused damage to parts of the site and is a threat to the water quality of the Caher River. The standard data form for the site details a list of threats to include: Agricultural activities, transportation, mining and extraction and recreational activities. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000036	Inagh River Estuary SAC	Within	Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330] Mediterranean salt meadows *(Juncetalia maritimi)* [1410] Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	The Inagh River Estuary is an estuarine channel that flows westwards to the sea from Ennistimon, in the south-west of Co. Clare. The site includes the estuaries of both the Inagh and Dealagh Rivers. These channels meander through a wide, flat valley, which is sheltered from the sea by an extensive sand dune system to the west. Low undulating hills surround the valley, giving it a secluded nature. The soils vary from gleys to peats. The standard data form for the site details a list of threats to include; agricultural activities and invasive non-native species. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000054	Moneen Mountain SAC	Within	Turloughs [3180] Alpine and Boreal heaths [4060] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Petrifying springs with tufa formation *(Cratoneurion)* [7220] Limestone pavements [8240] *Euphydryas aurinia* (Marsh Fritillary) [1065] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	Moneen Mountain is a large, composite site situated in north County Clare. It encompasses a complete range of inland Burren habitats, from open limestone pavement and its associated calcareous grasslands and heaths, to dense Hazel (Corylus avellana) scrub and patches of Ash (Fraxinus excelsior) woodland. The standard data form for the site details a list of threats to include; agricultural activities, paths, track and cycle tracks and agricultural structures. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000268	Galway Bay Complex SAC	Within	Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae)* [1330] Mediterranean salt meadows *(Juncetalia maritimi)* [1410] Turloughs [3180] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] Alkaline fens [7230] Limestone pavements [8240] *Lutra lutra* (Otter) [1355] *Phoca vitulina* (Harbour Seal) [1365]	Situated on the west coast of Ireland, this site comprises the inner, shallow part of a large bay which is partially sheltered by the Aran Islands. The Burren karstic limestone fringes the southern sides and extends into the sublittoral. West of Galway city the bedrock geology is granite. There are numerous shallow and intertidal inlets on the eastern and southern sides, notably Muckinish, Aughinish and Kinvarra Bays. A number of small islands composed of glacial deposits are located along the eastern side. The standard data form for the site details a list of threats to include; Agricultural activities, paths, tracks and cycle tracks, recreational activities and invasive non-native species. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000994	Ballyteige (Clare) SAC	Within	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	This small site lies over carboniferous shales over which a poorly-draining, acid gley soil has developed. The principal habitat on the site is wet grassland of the Junco acutiflori-molinietum type, in which grass and rush

				species predominate. A noteworthy feature of the site is the great abundance of the marsh orchid, Dactylorhiza majalis. The fauna of the site has not been studied but it is liable to be quite rich. The standard data form for the site details pressures to the site to include agricultural activities. These pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000996	Ballyvaughan Turlough SAC	Within	Turloughs [3180]	This site consists of a small, rather dry turlough and is situated about 1.5 km southwest of Ballyvaughan in Co. Clare. The site is relatively undisturbed with few signs of grazing or attempts at agricultural improvement. The standard data form for the site details threats to the site to include agricultural activities. These threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
001926	East Burren Complex SAC	Within	Hard oligo-mesotrophic waters with *benthic vegetation of Chara spp.* [3140] Turloughs [3180] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the *Violetalia calaminariae* [6130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Lowland hay meadows *(Alopecurus pratensis, Sanguisorba officinalis)* [6510] Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] Petrifying springs with tufa formation *(Cratoneurion)* [7220] Alkaline fens [7230] Limestone pavements [8240] Caves not open to the public [8310] Alluvial forests with *Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)* [91E0] *Euphydryas aurinia* (Marsh Fritillary) [1065] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303] *Lutra lutra* (Otter) [1355]	This large site incorporates all of the high ground in the east Burren in Counties Clare and Galway, and extends south-eastwards to include a complex of calcareous wetlands. The area encompasses a range of limestone habitats that include limestone pavement and associated calcareous grasslands and heath, scrub and woodland together with a network of calcareous lakes and turloughs. The standard data form for the site details a list of threats to include; agricultural improvement activities – these involve clearance of limestone pavement and associated habitats (heaths and grassland), subsequent reseeding, fertilization and then grazing. Heavy grazing pressures is a threat to the lowland areas of the site. The water quality of the various wetlands is vulnerable to run-off from agricultural lands. All of these pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
004005	Cliffs of Moher SPA	Within	Fulmar *(Fulmarus glacialis)* [A009] Kittiwake *(Rissa tridactyla)* [A188] Guillemot *(Uria aalge*) [A199] Razorbill *(Alca torda)* [A200] Puffin *(Fratercula arctica)* [A204] Chough *(Pyrrhocorax pyrrhocorax*) [A346]	This site extends a distance of some 9.5 km along the north Clare coast from Faunmore in the north to just south of Cancregga Point in the south. The cliffs, which rise to 203 m in height, are formed of horizontal beds of coal measure sandstones and shales. The standard data form for the site states recreational activities such as walking, horse-riding and non-motorised vehicles are a threat within the site boundary. No other site-specific threats have been identified by the NPWS.
004031	Inner Galway Bay SPA	Within	Great Northern Diver *(Gavia immer)* [A003] Cormorant *(Phalacrocorax carbo)* [A017] Grey Heron *(Ardea cinerea)* [A028] Light-bellied Brent Goose *(Branta bernicla hrota)* [A046] Wigeon *(Anas penelope)* [A050] Teal *(Anas crecca)* [A052] Shoveler *(Anas clypeata)* [A056] Red-breasted Merganser *(Mergus serrator)* [A069] Ringed Plover *(Charadrius hiaticula)* [A137] Golden Plover *(Pluvialis apricaria)* [A140] Lapwing *(Vanellus vanellus)* [A142] Dunlin *(Calidris alpina*) [A149] Bar-tailed Godwit *(Limosa lapponica*) [A157] Curlew *(Numenius arquata)* [A160] Redshank *(Tringa totanus)* [A162] Turnstone *(Arenaria interpres)* [A169] Black-headed Gull *(Chroicocephalus ridibundus)* [A179] Common Gull *(Larus canus)* [A182] Sandwich Tern *(Sterna sandvicensis)* [A191] Common Tern *(Sterna hirundo)* [A193] Wetland and Waterbirds [A999]	Inner Galway Bay SPA is a very large, marine-dominated site situated on the west coast of Ireland. The inner bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. The standard data form for the site details a list of threats to include; Agricultural activities, recreational activities and fishing. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.

004220	Corofin Wetlands SPA	Within	Little Grebe *(Tachybaptus ruficollis)* [A004] Whooper Swan *(Cygnus cygnus)* [A038] Wigeon *(Anas penelope)* [A050] Teal *(Anas crecca)* [A052] Black-tailed Godwit *(Limosa limosa)* [A156] Wetland and Waterbirds [A999]	Corofin Wetlands SPA incorporates Inchiquin Lough, Lough Atedaun, Lough Cullaun and their associated calcareous wetlands. The site extends south-westwards to include the floodplain of the River Fergus to the west of Corofin, Co. Clare. The site contains some of the best areas of oligotrophic limestone wetlands to be found in the Burren. The standard data form for the site details a list of threats to include; roads, motorways and disposal of household waste. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000238	Caherglassaun Turlough SAC	1.92	Turloughs [3180] Rivers with muddy banks *with Chenopodion rubri p.p. and Bidention p.p. vegetation* [3270] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	Caherglassaun is a large lake located 6 km north-west of Gort and 5 km south-east of Kinvarra in the low-lying farmland of east Co. Galway. Situated in a natural depression just to the north-west of Coole Nature Reserve, this site comprises a permanent lake at its core, while the rest of the basin functions as a turlough. At times of high water, the site can flood to a depth of 10-15 m. A series of collapse features act as swallow-holes. The standard data form for the site details a list of threats to include; agricultural activities, waste disposal and flooding. All of these pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002294	Cahermore Turlough SAC	3.03	Turloughs [3180]	Cahermore Turlough SAC is situated in the limestone lowlands of south Co. Galway, about 5 km north-west of Gort and 5.5 km south-east of Kinvara. It is part of a series of lakes and turloughs in the region, most of which are Special Areas of Conservation (SACs) or Natural Heritage Areas (NHAs). The nearest is Caherglassaun Turlough, the water levels of which are slightly higher than Cahermore. The site is mostly covered by drift which is mounded into hillocks in the south-eastern parts. The standard data form for the site details a list of threats to include; agricultural activities and waste disposal. Both of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
001021	Carrowmore Point To Spanish Point And Islands SAC	3.48	Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Petrifying springs with tufa formation *(Cratoneurion)* [7220]	This site extends along the Co. Clare coastline from Spanish Point (3 km west of Milltown Malbay) in a south-westerly direction to Carrowmore Point. It comprises a strip of coastline, several offshore islands and rocks (notably Mutton Island), and the open marine water of Mal Bay between the islands and the mainland. The standard data form for the site details a list of threats to include; hunting, agricultural activities, recreational activities and mining and quarrying. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
004182	Mid-Clare Coast SPA	3.51	Cormorant *(Phalacrocorax carbo)* [A017] Barnacle Goose *(Branta leucopsis)* [A045] Ringed Plover *(Charadrius hiaticula)* [A137] Sanderling *(Calidris alba)* [A144] Purple Sandpiper *(Calidris maritima)* [A148] Dunlin *(Calidris alpina)* [A149] Turnstone *(Arenaria interpres)* [A169] Wetland and Waterbirds [A999]	The Mid-Clare Coast SPA site extends along the Co. Clare coastline in a south-southwesterly direction from Spanish Point (3 km west of Milltown Malbay) to just west of Doonbeg Bay, a distance of some 14 km. It comprises the mainland shoreline, Mutton Island and Mattle Island, a series of rocky reefs and the open marine water of Mal Bay between the islands and the mainland. The standard data form for the site details a list of threats to include; fishing, recreational activities and agricultural activities. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000252	Coole-Garryland Complex SAC	4.14	Natural eutrophic lakes with *Magnopotamion or Hydrocharition* - type vegetation [3150] Turloughs [3180] Rivers with muddy banks with *Chenopodion rubri p.p. and Bidention p.p. vegetation* [3270] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Limestone pavements [8240] *Taxus baccata* woods of the British Isles [91J0]	The Coole-Garryland Complex is situated in a low-lying karstic limestone area west of Gort, in Co. Galway. It contains a series of seasonal lakes (turloughs), which are fed by springs and a partly submerged river, surrounded by woodland, pasture and limestone heath. The more well-known turloughs present in the site include Lydacan, Crannagh North, Raheen, Crannagh South, Coole, Garryland, Newtown and Hawkhill. The standard data form for the site details a list of threats to include; invasive non-native species, agricultural activities, sand and gravel extraction, roads, paths and cycleways and landfill. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000016	Ballycullinan Lake SAC	4.28	Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210]	Ballycullinan Lake is a calcareous lake situated approximately 2 km south of Corrofin in Co. Clare. The site includes a series of smaller lakes to the north-east of Ballycullinan; Cragmoher Lough, Drumcavan Lough and Shanvally Lough. No Site-specific threats have been identified by the NPWS.
004107	Coole-Garryland SPA	4.30	Whooper Swan *(Cygnus cygnus)* [A038]	The Coole-Garryland SPA is situated in a low-lying karstic limestone area west of Gort, Co. Galway. It comprises a series of turloughs, which are fed by springs and a partly submerged river, surrounded by woodland, pasture and limestone heath. The standard data form for the site details a list of threats to include; agricultural activities, forestry, hunting, disposal of household waste and forest exploitation without replanting. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.

002244	Ardrahan Grassland SAC	5.31	Alpine and Boreal heaths [4060] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Limestone pavements [8240]	This site lies immediately west and north of Ardrahan in south Co. Galway. It is dominated by a large flat limestone area with a mosaic of calcareous habitats including limestone pavement, alpine heath, Juniper scrub and species rich dry grasslands. The standard data form for the site details a list of threats to include; agricultural activities, roads, paths and railroads and the disposal of inert materials. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
001285	Kiltiernan Turlough SAC	5.83	Turloughs [3180]	Kiltiernan Turlough lies in a linear depression running south-westwards from the main Galway-Limerick road, north-west of Ardrahan in Co. Galway. It has a flattish basin which lies approximately 2 m below road level, and includes about eight further depressions which are joined in times of high water. No threats have been identified by the NPWS for this site.
002246	Ballycullinan, Old Domestic Building SAC	5.93	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	This site consists of a derelict dwelling which is a Lesser Horseshoe Bat breeding site and a number of the surrounding fields. It is situated east of Ballycullinan Lough in Co. Clare. The standard data form for the site details a list of pressures to include; demolishment of buildings and human structures and agricultural activities. All of these pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
001321	Termon Lough SAC	6.00	Turloughs [3180]	Termon Lough SAC is situated approximately 6 km south-west of Gort, on the border between Counties Clare and Galway. It consists of a series of three turloughs, with low, drift-covered slopes on all sides except in the north-east, where a small area of limestone pavement is found. The turloughs are hydrologically linked at times of high water. Land use at the site is mainly agricultural. Agricultural improvement in the form of field enlargement, fertilisation and scrub removal has occurred in a number of places, and particularly around Termon North, and at the northern and western edge of Termon Lough. Cattle are out-wintered at the north of the site and there are ringfeeders and clamped silage in at least three areas quite close to the turlough. The standard data form for the site details a list of threats to include; agricultural activities and the disposal of waste. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000032	Dromore Woods And Loughs SAC	6.19	Natural eutrophic lakes with *Magnopotamion or Hydrocharition* - type vegetation [3150] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Limestone pavements [8240] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303] *Lutra lutra* (Otter) [1355]	Situated in central Clare, 9 km north-west of Ennis, the Dromore Woods and Loughs SAC site lies on the southern edge of the Clare limestone. The topography is a continuation of the Burren type landscape although at a lower elevation, with most of the land lying between 15 and 35 m. The site includes several lakes which are mostly linked by the River Fergus. The standard data form for the site details a list of threats to include; roads and motorways, agricultural activities, forestry and recreational activities. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000019	Ballyogan Lough SAC	6.66	Calcareous fens with Cladium mariscus and species of *the Caricion davallianae* [7210]	Ballyogan Lough is a complex of limestone pavement, scrub woodland, lake and fen situated about 10 km east of Corrofin, Co. Clare. The standard data form for the site details a list of threats to include: agricultural activities, invasive non-native species and mining/ quarrying. All of these pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002245	Old Farm Buildings, Ballymacrogan SAC	7.24	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	This site, which is west of Ruan in Co. Clare, consists of a farmyard which contains a series of stone sheds. The Lesser Horseshoe Bat, a species listed on Annex II of the E.U. Habitats Directive, breeds in two of the buildings. No Site-Specific threats have been identified by the NPWS.
002295	Ballinduff Turlough SAC	7.36	Turloughs [3180]	Ballinduff Turlough is situated in a narrow basin in the limestone lowlands of south Co. Galway, 5 km north-east of Gort. It is part of the Coole Lough complex of lakes and turloughs, most of which are Special Areas of Conservation (SACs) or Natural Heritage Areas (NHAs). The standard data form for the site details a list of threats to include; agricultural activities and waste disposal. Both of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
001275	Inisheer Island SAC	7.41	Coastal lagoons [1150] Reefs [1170] European dry heaths [4030]	Inisheer is the smallest of the three Aran Islands, situated approximately 10 km off the west coast of Co. Clare. The island is a geological extension of the karstic Carboniferous region of the Burren. Upper Carboniferous limestone strata, interleaved with layers of shale and clay, form these exposed islands, which rise to a maximum height of 64 m on Inisheer.

			Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Lowland hay meadows *(Alopecurus pratensis, Sanguisorba officinalis)* [6510] Limestone pavements [8240]	The standard data form for the site details a list of threats to include; mining, agricultural activities, invasive species and agricultural structures. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000286	Kiltartan Cave (Coole) SAC	7.45	Caves not open to the public [8310] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	Kiltartan cave is a natural limestone cave situated north of Coole Park in Co. Galway, just off the main Galway-Ennis road. It is used as a hibernating site for the Lesser Horseshoe Bat. The standard data form for the site details a list of threats to include; recreational activities, roads and motorways and flooding. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000242	Castletaylor Complex SAC	7.94	Turloughs [3180] Alpine and Boreal heaths [4060] *Juniperus communis* formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* (* important orchid sites) [6210] Limestone pavements [8240]	The Castletaylor Complex is situated approximately 4 km south-east of Kilcolgan in Co. Galway and lies in a gently undulating limestone topography. Although relatively small in area, the site contains a diverse range of habitats. The standard data form for the site details a list of threats to include; agricultural activities, landfills and forestry. All of these pressures have been identified within the site boundary. No other site-specific threats have been identified by the NWPS. This low-impact farming, combined with the absence of fertiliser, has maintained the species-richness and high diversity of the island flora. A move towards agricultural intensification would see the deterioration of this unique environment. The survival of the complement of rare arable weeds which occur here depends on continuation of the current traditional practice of rye cultivation for thatching. Plans to develop the island for tourism and amenity require close monitoring, in order to safeguard the wildlife and scientific value of Inishmaan. The standard data form identified the following threats and pressures for the SAC: Landfill issues, Groundwater pollution from agriculture and forestry, Domestic sewage, Hedgerow removal, Intensive cattle grazing, and Forestry. No other site-specific threats have been identified by the NPWS.
000057	Moyree River System SAC	7.97	Water courses of plain to montane levels with the Ranunculion fluitantis and *Callitricho-Batrachion* vegetation [3260] Alkaline fens [7230] Limestone pavements [8240] Caves not open to the public [8310] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303] *Lutra lutra* (Otter) [1355]	The Moyree River is situated in a sheltered valley on the south-eastern fringe of the Burren, Co. Clare. Ballyvaughan Lough lies to the north of Moyree, with Dromore Woods and Lough to the south-west. The standard data form for the site details a list of threats to include; agricultural activities, pollution, forestry, hunting, invasive species and recreational activities. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
004142	Cregganna Marsh SPA	8.00	Greenland White-fronted Goose *(Anser albifrons flavirostris)* [A395]	Cregganna Marsh is situated about 3 km south of Oranmore, to the west of the Galway - Ennis road. The predominant habitats on the site are lowland wet grassland and improved grassland, but areas of limestone pavement and other exposed rock, Hazel (Corylus avellana) scrub, freshwater marsh, drainage ditches and dry grassland are also represented. The standard data form for the site details agricultural activities as the main threat. No other site-specific threats have been identified by the NPWS.
002247	Toonagh Estate SAC	9.17	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	This site consists of part of a former estate and is located 5 km north-west of Ennis, Co. Clare. A stable provides a nursery roost for the Lesser Horseshoe Bat. The standard data form for the site details a list of threats to include; agricultural activities, dispersed habitation and invasive species. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002293	Carrowbaun, Newhall and Ballylee Turloughs SAC	9.29	Turloughs [3180]	The Carrowbaun, Newhall and Ballylee Turloughs SAC complex is a group of three turloughs which are hydrologically linked in times of high flood. It is situated in the vicinity of the Thoor Ballylee Interpretive Centre, 3 km west of Peterswell and 6 km north-east of Gort, in the limestone lowlands of south Co. Galway. The standard data form for the site details a list of threats to include; Agricultural activities, roads and motorways, renovations and pollution. All of these threats have been identified both within and outside the site boundary. No other site-specific threats have been identified by the NPWS.
000299	Lough Cutra SAC	10.26	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	Lough Cutra is a large oligo/mesotrophic freshwater lake lying on limestone, but with much sediment washed down from the sandstone hills above. This lake is situated about 4 km south-east of Gort, Co. Galway. The standard data form for the site details a list of threats to include; forestry clearance, noise pollution, agricultural activities and renovations of buildings. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000322	Rahasane Turlough SAC	10.55	Turloughs [3180]	Rahasane Turlough lies in gently undulating land, approximately 2 km west of Craughwell, Co. Galway. It consists of two basins which are connected at times of flood but separated as the waters decline. The larger of these, the northern basin, takes the Dunkellin River westwards.

				The standard data form for the site details a list of threats to include; drainage schemes, shooting, invasive non-native species, agricultural activities, paths, tracks and cycle tracks, recreational activities, removal of beach materials, quarries and dumping of waste. All of these pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
004089	Rahasane Turlough SPA	10.55	Whooper Swan *(Cygnus cygnus)* [A038] Wigeon (*Anas penelope)* [A050] Golden Plover *(Pluvialis apricaria)* [A140] Black-tailed Godwit *(Limosa limosa)* [A156] Greenland White-fronted Goose *(Anser albifrons flavirostris*) [A395] Wetland and Waterbirds [A999]	Rahasane Turlough lies in gently undulating land, approximately 2 km west of Craughwell, Co. Galway. It consists of two basins which are connected at times of flood but separated as the waters recede. The larger of these, the northern basin, takes the Dunkellin River westwards. The standard data form for the site details a list of threats to include; grazing and hunting. These threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002117	Lough Coy SAC	10.60	Turloughs [3180]	Lough Coy is situated approximately 6.5 km north-east of Gort in Co. Galway and lies close to the Slieve Aughty hills. The site consists of a small permanent lake in the middle of an almost circular turlough basin. The standard data form for the site details threats to include; agricultural activities. All threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002317	Cregg House Stables, Crusheen SAC	10.82	*Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	Cregg House is situated approximately 10 km south of Gort, Co. Galway. The site consists of an old, stone stable block. It contains an important maternity roost of the Lesser Horseshoe Bat. There are no threats listed by the NPWS for this site.
004168	Slieve Aughty Mountains SPA	11.06	Hen Harrier *(Circus cyaneus)* [A082] Merlin *(Falco columbarius)* [A098]	The Slieve Aughty Mountains SPA is a very large site that extends southwards from just south of Lough Rea, County Galway to Scariff in County Clare. The peaks are not notably high or indeed pronounced; the site rises to a maximum 400 m at Maghera west of Lough Graney. The standard data form for the site details a list of threats to include; roads/motorways, agricultural activities, disposal of household waste, peat extraction and forestry. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
004056	Lough Cutra SPA	11.19	Cormorant *(Phalacrocorax carbo)* [A017]	Lough Cutra is a large oligo/mesotrophic freshwater lake lying on limestone, but with much sediment washed down from the sandstone hills above. This lake is situated about 4 km south-east of Gort, Co. Galway. The standard data form for the site details a list of threats to include; forestry clearance, noise pollution, agricultural activities and renovations of buildings. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000297	Lough Corrib SAC	11.27	Coastal lagoons [1150] Reefs [1170] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Natural dystrophic lakes and ponds [3160] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Euphydryas aurinia (Marsh Fritillary) [1065] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Najas flexilis (Slender Naiad) [1833]	The Connemara Bog Complex SAC is a large site encompassing the majority of the south Connemara lowlands in Co. Galway. The site is bounded to the north by the Galway–Clifden road and stretches as far east as the Moycullen–Spiddal road. The site supports a wide range of habitats, including extensive tracts of western blanket bog, which form the core interest, as well as areas of heath, fen, woodlands, lakes, rivers and coastal habitats. The main damaging operations and threats in the Connemara Bog Complex are peat cutting, over-grazing and afforestation. Extensive peat extraction using 'Difco' machines has become common in the region in recent years, and cutting by excavator and hopper is also increasing. The hand-cutting of peat is less threatening as it is usually on a much smaller scale, but nonetheless it should be controlled within the site. Over-grazing and poaching by sheep and cattle is a widespread problem within the site, with erosion of peat ensuing. The above operations are the most extensive but other threats and potentially damaging operations include land drainage and reclamation, fertilization, quarrying and dumping.
000318	Peterswell Turlough SAC	11.43	Turloughs [3180] Rivers with muddy banks with *Chenopodion rubri p.p. and Bidention p.p. vegetation* [3270]	This elongated turlough, running north-east to south-west lies parallel to the Peterswell-Castledaly section of the Gort-Loughrea road in Co. Galway. The surrounding land is gently rolling and drift-covered. The standard data form for the site details a list of threats to include; agricultural activities, waste disposal, oil spills and marine pollution from plastic bags etc. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
000014	Ballyallia Lake SAC	11.45	Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation [3150]	Ballyallia Lake is a relatively small, shallow lake situated on the River Fergus approximately 4 km north of Ennis, Co. Clare. It is a naturally eutrophic lake, a habitat listed on Annex I of the E.U. Habitats Directive.

				The standard data form for the site details threats to the site to include agricultural activities. This threat has been identified within the site. No other site-specific threats have been identified by the NPWS.
004041	Ballyallia Lough SPA	11.45	Wigeon *(Anas penelope)* [A050] Gadwall *(Anas strepera)* [A051] Teal *(Anas crecca)* [A052] Mallard *(Anas platyrhynchos)* [A053] Shoveler *(Anas clypeata)* [A056] Coot *(Fulica atra)* [A125] Black-tailed Godwit *(Limosa limosa)* [A156] Wetland and Waterbirds [A999]	Ballyallia Lough is a relatively small lake located on the River Fergus, a little north of Ennis town, Co. Clare. It is a shallow system but can rise substantially during winter floods. The standard data form for the site details a list of threats to include; agricultural activities and recreational activities. These pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002034	Connemara Bog Complex SAC	11.86	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130] Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230] Limestone pavements [8240] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Bog woodland [91D0] Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Drepanocladus vernicosus (Slender Green Feather-moss) [1393] Najas flexilis (Slender Naiad) [1833]	Lough Corrib is situated to the north of Galway city and is the second largest lake in Ireland, with an area of approximately 18,240 ha (the entire site is 20,556 ha). The lake can be divided into two parts: a relatively shallow basin, underlain by Carboniferous limestone, in the south, and a larger, deeper basin, underlain by more acidic granite, schists, shales and sandstones to the north. The surrounding lands to the south and east are mostly pastoral farmland, while bog and heath predominate to the west and north. A number of rivers are included within the cSAC as they are important for Atlantic Salmon. These rivers include the Clare, Grange, Abbert, Sinking, Dalgan and Black to the east, as well as the Cong, Bealanabrack, Failmore, Cornamona, Drimneen and Owenriff to the west. In addition to the rivers and lake basin, adjoining areas of conservation interest, including raised bog, woodland, grassland and limestone pavement, have been incorporated into the site. The main threats to the quality of this site are from water polluting activities resulting from intensification of agricultural activities on the eastern side of the lake, uncontrolled discharge of sewage which is causing localised eutrophication of the lake, and housing and boating development, which is causing the loss of native lakeshore vegetation. The raised bog habitats are susceptible to further degradation and drying out due to drainage and peat cutting and, on occasions, burning. Peat cutting threatens Addergoole Bog and already a substantial area of it has been cut away. Fishing and shooting occur in and around the lake. Introduction of exotic crayfish species or the crayfish fungal plague (Aphanomyces astaci) could have a serious impact on the native crayfish population. The bat roost is susceptible to disturbance or development.
000212	Inishmaan Island SAC	12.62	Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Machairs (* in Ireland) [21A0] European dry heaths [4030] Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210] Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) [6510] Limestone pavements [8240]	Inishmaan is the middle of the three Aran Islands, situated approximately 15 km off the west coast of Co. Clare (though the Aran Islands are part of Co. Galway). Geologically, the island is an extension of the Burren. The shallow soil is, in many places, a man-made combination of sand and seaweed built up over the centuries. Pockets of rendzina are also found. This site is of major scientific importance owing to the range of outstanding karstic Carboniferous limestone and coastal habitats, many of which are listed as priority and Annex I habitats under the E.U. Habitats Directive. The site is dominated by limestone pavement and its associated calcareous grasslands. Other Annex I habitats which occur include dry heath, lowland hay meadows and orchid-rich calcareous grassland. Agricultural intensity is lowest on Inishmaan, compared with the other two Aran Islands. The majority of the land is used as winterage for cattle, sheep and, in some places, goats. The fields located close to the houses are used for summer grazing. This low-impact farming, combined with the absence of fertiliser, has maintained the species-richness and high diversity of the island flora. A move towards agricultural intensification would see the deterioration of this unique environment. The survival of the complement of rare arable weeds which occur here depends on continuation of the current traditional practice of rye cultivation for thatching. Plans to develop the island for tourism and amenity require close monitoring, in order to safeguard the wildlife and scientific value of Inishmaan.

				The standard data form for the site details a list of threats to include; Coastal defence work, Outdoor sports and leisure activities, recreational activities, Taking / Removal of terrestrial plants, general, Invasive species, and Agricultural issues such as fertilisation, over grazing and material storage etc. These pressures have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002165	Lower River Shannon SAC	12.87	Sandbanks which are slightly covered by sea water all the time [1110] Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330] Mediterranean salt meadows *(Juncetalia maritimi) [1410]* Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Alluvial forests with *Alnus glutinosa and Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0] *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029] *Petromyzon marinus* (Sea Lamprey) [1095] *Lampetra planeri* (Brook Lamprey) [1096] *Lampetra fluviatilis* (River Lamprey) [1099] *Salmo salar* (Salmon) [1106] *Tursiops truncates* (Common Bottlenose Dolphin) [1349] *Lutra lutra* (Otter) [1355]	This very large site stretches along the Shannon valley from Killaloe in Co. Clare to Loop Head/ Kerry Head, a distance of some 120 km. The site thus encompasses the Shannon, Feale, Mulkear and Fergus estuaries, the freshwater lower reaches of the River Shannon (between Killaloe and Limerick), the freshwater stretches of much of the Feale and Mulkear catchments and the marine area between Loop Head and Kerry Head. The standard data form for the site details a list of threats to include; invasive non-native species, agricultural activities, roads/motorways, recreational activities, forestry, removal of beach materials and hand cutting of peat. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
004181	Connemara Bog Complex SPA	13.53	*Cormorant (Phalacrocorax carbo) [A017]* Merlin *(Falco columbarius) [A098]* Golden Plover *(Pluvialis apricaria) [A140]* Common Gull *(Larus canus) [A182]*	The Connemara Bog Complex SPA is a large site encompassing much of the south Connemara lowlands of Co. Galway. The site consists of three separate areas - north of Roundstone, south of Recess and north-west of Spiddal. It is underlain predominantly by a variety of igneous and metamorphic rocks including granite, schist, gneiss and gabbro. The whole area was glaciated during the last Ice Age which scoured the lowlands of Connemara. The standard data form for the site details a list of threats to include; forestry, fragmentation, roads, invasive species, and peat extraction. No other site-specific threats have been identified by the NPWS.
002250	Carrowmore Dunes SAC	13.67	Reefs [1170] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]	Carrowmore Dunes are situated on the south-western coast of Co. Clare, roughly midway between Milltown Malbay and Kilkee, and extend from Carrowmore Point in the north to Doonbeg Bay in the south. Fine sandy beach merges into a cobble beach on the seaward side of a sand dune system. Exposed bedrock marks the northern and southern boundaries of the site. Seaward, the site extends for 500 m from the shore to include shallow marine waters. The geology of the site comprises Upper Carboniferous sandstone and shale. Pure sand dominates the soils on the seaward side, with increasing organic content further inland. The standard data form for the site details a list of threats to include; extraction and erosion, fishing, agricultural activities, and outdoor sports and leisure activities, recreational activities. No other site-specific threats have been identified by the NPWS.
000037	Pouladatig Cave SAC	13.84	Caves not open to the public [8310] *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]	Pouladatig cave is a natural limestone cave situated near Inch bridge, west of Ennis, Co. Clare. It is used as a hibernating site for the Lesser Horseshoe Bat. There are no site-specific threats identified by the NPWS.
002180	Gortacarnaun Wood SAC	14.41	Old sessile oak woods with *Ilex and Blechnum* in the British Isles [91A0]	This site is situated in the foothills of the Slieve Aughty Mountains in Co. Galway, approximately 2 km east of Lough Cutra. The northern boundary is marked by the Owendalulleegh River. Gortacarnaun Wood consists of a substantial area of woodland on sloped ground between approximately 60 and 90 m. The soils are sandy clay and there are many rock outcrops.

				The standard data form for the site details a list of threats to include; grazing in forests/woodlands, agricultural activities and invasive non-native species. All of these threats have been identified within the site boundary. No other site-specific threats have been identified by the NPWS.
002181	Drummin Wood SAC	14.58	Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]	Ballyogan Lough is a complex of limestone pavement, scrub woodland, lake and fen situated about 10 km east of Corrofin, Co. Clare. The standard data form for the site details a list of threats to include: agricultural activities, invasive non-native species and mining/ quarrying. No other site-specific threats have been identified by the NPWS.
004042	Lough Corrib SPA	14.93	Gadwall *(Anas strepera) [A051]* Shoveler *(Anas clypeata) [A056]* Pochard *(Aythya ferina) [A059]* Tufted Duck *(Aythya fuligula) [A061]* Common Scoter *(Melanitta nigra) [A065]* Hen Harrier *(Circus cyaneus) [A082]* Coot *(Fulica atra) [A125]* Golden Plover *(Pluvialis apricaria) [A140]* Black-headed Gull *(Chroicocephalus ridibundus) [A179]* Common Gull *(Larus canus) [A182]* Common Tern *(Sterna hirundo) [A193]* Arctic Tern *(Sterna paradisaea) [A194]* Greenland White-fronted Goose *(Anser albifrons flavirostris) [A395]* Wetland and Waterbirds *[A999]*	Lough Corrib is the largest lake in the country and is located, for the most part, in County Galway, with a small section in the north extending into County Mayo. The lake can be divided into two parts: a relatively shallow basin in the south, which is underlain by Carboniferous limestone, and a larger, deeper basin to the north, which is underlain by more acidic granite, schists, shales and sandstones. The main inflowing rivers are the Black, Clare, Dooghta, Cregg, Owenriff and the channel from Lough Mask. The main outflowing river is the Corrib, which reaches the sea at Galway City. The standard data form for the site details a list of threats to include: agricultural activities, forestry, hunting, nautical sports and urbanization. No other site-specific threats have been identified by the NPWS.

List of all Qualifying Interests of SACs that have undergone Assessment including Summaries of Current Threats and Sensitivity to Effects

Qualifying Interests	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Inappropriate grazing levels; invasive species; and clearance for agriculture or felling for timber	Surface and groundwater dependent. Highly sensitive to hydrological changes. Changes in management.
Alosa fallax fallax *(Twaite Shad*) [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
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
Annual vegetation of drift lines [1210]	Grazing; sand and gravel extraction; recreational activities; coastal protection works	Overgrazing and erosion. Changes in management.
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	Overgrazing; erosion; invasive species, particularly common cordgrass (*Spartina anglica*); infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion
Blanket bogs (* if active bog) [7130]	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
Calaminarian grasslands of the Violetalia calaminariae [6130]	Land reclamation, afforestation; drainage; and infrastructural development.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management
Calcareous rocky slopes with chasmophytic vegetation [8210]	Overgrazing; extractive industries; recreational activities and improved access	Erosion, overgrazing and recreation.
Depressions on peat substrates of the Rhynchosporion [7150]	Drainage; burning; peat extraction; overgrazing; afforestation; erosion; and climate change.	Surface and groundwater dependent. Low sensitivity to hydrological changes. Erosion, land-use changes
Dunes with Salix repens ssp. argentea *(Salicion arenariae)* [2170]	Agricultural improvement; overgrazing and inappropriate grazing; forestry; recreational activity	Overgrazing, and erosion. Changes in management.
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.
Estuaries [1130]	Pollution, fishing /aquaculture and habitat quality.	Inappropriate development, changes in turbidity and
Euphydryas aurinia (Marsh Fritillary) [1065]	Declines in habitat quality lead to species decline.	Habitat management; land use change and drainage.
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
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Recreation; overgrazing and inappropriate grazing: non-native plant species, particularly sea buckthorn (*Hippophae rhamnoides*),	Overgrazing, and erosion. Changes in management.
Halichoerus grypus (Grey Seal) [1364]	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.
Humid dune slacks [2190]	Agricultural improvement; overgrazing and inappropriate grazing; forestry; recreational activity	Overgrazing, and erosion. Changes in management. Sensitive to hydrological change.
Lampetra fluviatilis (River Lamprey) [1099]	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	Surface water dependent Highly sensitive to hydrological change

Qualifying Interests	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Lampetra planeri (Brook Lamprey) [1096]	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	Surface water dependent Highly sensitive to hydrological change
Lutra lutra (Otter) [1355]	Decrease in water quality: Use of pesticides; fertilization; vegetation removal; professional fishing (including lobster pots and fyke nets); hunting; poisoning; sand and gravel extraction; mechanical removal of peat; urbanised areas; human habitation; continuous urbanization; drainage; management of aquatic and bank vegetation for drainage purposes; and canalization or modifying structures of inland water course.	Surface and marine water dependent. Moderately sensitive to hydrological change. Sensitivity to pollution
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	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
Mediterranean salt meadows (Juncetalia maritimi) [1410]	Over-grazing by cattle or sheep; infilling and reclamation.	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Coastal development and reclamation.
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410]	Agricultural intensification; drainage; abandonment of pastoral systems	Surface and groundwater dependent. Moderately sensitive to hydrological change. Changes in management. Changes in nutrient status
Mudflats and sandflats not covered by seawater at low tide [1140]	Aquaculture, fishing, bait digging, removal of fauna, reclamation of land, coastal protection works and invasive species, particularly cord-grass; hard coastal defence structures; sea-level rise.	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Changes to salinity and tidal regime. Coastal development
Natural dystrophic lakes and ponds [3160]	Nutrient alterations; management shifts in the associated peatland habitat, afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution
Northern Atlantic wet heaths with Erica tetralix [4010]	Reclamation, afforestation and burning; overstocking; invasion by non-heath species; exposure of peat to severe erosion.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Inappropriate management
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to oak woodlands; and the construction of communication networks through the woodland.	Changes in management. Changes in nutrient or base status. Introduction of alien species.
Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) [3110]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution
Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130]	Nutrient enrichment; afforestation; waste water; invasive alien species; sport and leisure activities.	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution
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.
Petalophyllum ralfsii (Petalwort) [1395]	There are no significant impacts affecting this species.	None identified
Petromyzon marinus (Sea Lamprey) [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.
Phocoena phocoena (Harbour Porpoise) [1351]	The main threats to this species include; by-catch in fishing gear, pollution of the marine environment and habitat degradation.	Falling prey densities is a threat to this species.
Reefs [1170]	Professional fishing; taking for fauna; taking for flora; water pollution; climate change; and change in species composition.	Sensitive to disturbance and pollution.
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
Salmo salar (Salmon) [1106]	Marine survival rates are of concern for the populations.	Disease, parasites and barriers to movement.
Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120]	Removal of beach material and interference with the supply of sand; construction of coastal defences; sand compaction caused by vehicles and trampling.	Overgrazing, and erosion. Changes in management
Siliceous rocky slopes with chasmophytic vegetation [8220]	Overgrazing; extractive industries; recreational activities and improved access	Erosion, overgrazing and recreation.
Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110]	Overgrazing; extractive industries; recreational activities and improved access.	Erosion, overgrazing and recreation
Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230]	Forestry planting and agricultural improvements are ongoing and causing habitat loss, along with succession to heath and scrub.	Land use management activities
Trichomanes speciosum (Killarney Fern) [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
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	Erosion; grazing; recreational pressures; development of golf courses and housing; dumping; cutting of peat; coastal protection works; climate change	Coastal development. Erosion, over-grazing and recreation

Qualifying Interests	Current threats to Qualifying Interests	Sensitivity of Qualifying Interests
Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]	Loss of riverside and canalside habitat; exploitation of esker sites and drainage of wetlands, and sheep grazing and overexploitation of dune sites.	Groundwater dependent. Highly sensitive to hydrological changes
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	Eutrophication; overgrazing, excessive fertilisation; afforestation; and the introduction of invasive alien species.	Surface and groundwater dependent. Highly sensitive to hydrological changes. Highly sensitive to pollution.
Submerged or partially submerged seacaves [8330]	No specific threats were identified for the habitat.	Sensitive to natural processes and human activities.
Soft waterlakes with base rich influences [3130]	Eutrophication, peat cutting, losses from agriculture and peatland drainage.	Highly sensitive to hydrological change and water pollution.
Coastal Lagoons [1150]	Drainage, natural silting, nutrient enrichment, water pollution from industrial and commercial activities.	Sensitive to disturbance and pollution.
Large shallow inlets and bays [1160]	Drainage, siltation and pollution are threats to this habitat type	Highly sensitive to hydrological changes. Highly sensitive to pollution.
Kerry Slug (Geomalacus maculosus) [1024]	Main threats to this species include; afforestation, forestry management, invasion of woodland by Rhododendron ponticum, agricultural reclamation and infrastructure development	Land use management, groundwater dependant
Juniperus communis formations on heaths or calcareous grasslands [5130]	Overgrazing; fire; agricultural expansion; invasion by alien species particularly *Rhododenron ponticum*; and poor regeneration.	Onset of inundation or waterlogging Inappropriate management
Taxus baccata woods of the British Isles [91J0]	Invasive alien's species. Restricted distribution and limited suitable habitat	Inappropriate management, Invasion by alien species
Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303]	Loss of roosting sites due to deterioration or renovation of old buildings, loss of commuting routes linking roosts to foraging sites, and unsympathetic management of foraging habitats are the major threats to this species.	Highly sensitive to disturbance.
SlenderNaiad (Najas flexilis) [1833]	Fertilization; disposal of household waste; water pollution; eutrophication; and invasion by alien species.	Highly sensitive to hydrological changes. Highly sensitive to pollution.
Sandbanks [1110]	The NPWS state that it is considered that current pressures and future threats are unlikely to significantly impact this habitat.	None identified
Bottle-Nosed Dolphin *(Tursiops truncatus)* [1349]	The bottlenose dolphin is vulnerable to a range of threats and pressures in its natural habitat. Such threats and pressures include accidental entanglement in fishing gear, competition for prey resources, pollution and other habitat degradation, and disturbance by human activities.	Human interaction, pollution, noise.

List of all Special Conservation Interest of SPAs that have undergone Assessment including Summaries of Current Threats and Sensitivity to Effects

Special Conservation Interests				Vulnerabilities of Special Conservation Interests
Little Grebe *(Tachybaptus ruficollis)* [A004] Whooper Swan *(Cygnus cygnus)* [A038] Wigeon *(Anas penelope)* [A050] Cormorant *(Phalacrocorax carbo)* [A017] Teal *(Anas crecca)* [A052] Black-tailed Godwit *(Limosa limosa)* [A156] Hen Harrier *(Circus cyaneus)* [A082] Merlin *(Falco columbarius)* [A098] Great Northern Diver *(Gavia immer)* [A003] Grey Heron *(Ardea cinerea)* [A028]	Light-bellied Brent Goose *(Branta bernicla hrota)* [A046] Shoveler *(Anas clypeata)* [A056] Red-breasted Merganser *(Mergus serrator)* [A069] Barnacle Goose *(Branta leucopsis)* [A045] Ringed Plover *(Charadrius hiaticula)* [A137] Sanderling *(Calidris alba)* [A144] Purple Sandpiper *(Calidris maritima)* [A148] Dunlin *(Calidris alpina)* [A149] Turnstone *(Arenaria interpres)* [A169] Golden Plover *(Pluvialis apricaria)* [A140]	Lapwing *(Vanellus vanellus)* [A142] Dunlin *(Calidris alpina*) [A149] Bar-tailed Godwit *(Limosa lapponica*) [A157] Curlew *(Numenius arquata)* [A160] Redshank *(Tringa totanus)* [A162] Turnstone *(Arenaria interpres)* [A169] Black-headed Gull *(Chroicocephalus ridibundus)* [A179] Common Gull *(Larus canus)* [A182]	Sandwich Tern *(Sterna sandvicensis)* [A191] Common Tern *(Sterna hirundo)* [A193] Golden Plover *(Pluvialis apricaria)* [A140] Mallard *(Anas platyrhynchos)* [A053] Shoveler *(Anas clypeata)* [A056] Greenland White-fronted Goose *(Anser albifrons flavirostris)* [A395] Coot *(Fulica atra)* [A125]	• Bird species are particularly vulnerable to direct disturbance due to noise and/or vibration. These effects are localised, and disturbance effects are foreseen to be low at distances beyond 2km. • Direct habitat loss is a serious concern for bird species, as well as the reduction in habitat quality. Habitat degradation could occur through effects such as local enrichment due to agricultural practices or damage to habitat through activities such as trampling. • Prey species diversity and availability is a key element of species conservation. Community dynamics and ecosystem functionality are complex concepts and require site specific information. The site synopsis and conservation objectives for the SPAs identified within the ZOI were used to identify any specific prey sensitivities. • Availability of nesting/roosting habitat. Particularly for the Hen Harrier. • Vegetation composition, structure and functionality.
Wetland and Waterbirds [A999]				Direct land take is a common vulnerability to all sites; as well as significant water quality effects. The conservation objective of all SPAs designated for Wetland and Waterbirds is to maintain the favourable conservation condition of the wetland habitat as a resource for the regularly-occurring migratory waterbirds using it.

Appendix II Relationship Other Plans and Programmes

Relationship Other Plans and Programmes	Summary of high-level aim/ purpose/ objective	Relevance to the Plan
Ireland 2040 - Our Plan, the National Planning Framework, (replacing the National Spatial Strategy 2002-2020) and the National Development Plan (2018-2027)	• The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. • The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Infrastructure and Capital Investment Plan (2016-2021)	• €27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to 2021 will help to lay the foundations for continued growth in Ireland.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Eirgrid's Grid25 Strategy and associated Grid25 Implementation Programme 2011 -2016	• Eirgrid's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland. • To be superseded by Draft Grid Implementation Plan 2017-2022	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for the Future Development of National and Regional Greenways (2018)	• The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. • It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Strategic Plan for Aquaculture Development (2014-2020)	Vision: *"Aquaculture in RC is economically, socially and ecologically sustainable, with a developed infrastructure, strong human potentials and an organized market. The consumption of aquaculture products is equal or above EU average, while the technological development of the sector is among the best in the EU."*	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Construction 2020, A Strategy for a Renewed Construction Sector	• Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. • The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Marine Spatial Plan for Ireland (in/pending preparation)	It is intended that the Marine Spatial Plan will be finalised in 2020, and forwarded to the European Commission at that time, ahead of the due date for submission by Member States of their plans in March 2021.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Action Plan 2016-2018	Includes a total of 23 actions to be addressed in the period between now and 2018 aimed at securing continued growth in overseas tourism revenue and employment.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2014-2016)	• This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Harvest 2020	• Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Relationship Other Plans and Programmes	Summary of high-level aim/ purpose/ objective	Relevance to the Plan
National Rural Development Programme	• The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
River Basin Management Plans	• River Basin Management Plans set out the status of waters in the River Basin District.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Cycle Network Scoping Study 2010	• Outlines objectives and actions aimed at developing a strong cycle network in Ireland • Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Cycle Network Scoping Study 2010	• Outlines objectives and actions aimed at developing a strong cycle network in Ireland • Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Policy Framework for Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030	• This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable. • By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional Economic and Spatial Strategies, replacing Regional Planning Guidelines [in preparation]	Regional Planning Guidelines (RPGs) provide long-term strategic planning frameworks and will be replaced by Regional Spatial and Economic Strategies (RSESs).The Regional Spatial and Economic Strategies will provide a long-term regional level strategic planning and economic framework in support of the implementation of the National Planning Framework.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include: • To identify and evaluate the features of interest for a site • To set clear objectives for the conservation of the features of interest • To describe the site and its management • To identify issues (both positive and negative) that might influence the site • To set out appropriate strategies/management actions to achieve the objectives	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Economic and Community Plans (LECP)	• The overarching vision for each LECP is: "to promote the well-being and quality of life of citizens and communities"	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Development Plans, Local Area Plans, Planning Schemes	• Outlines planning objectives for land use development (including transport objectives). • Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies. • Sets out the policies and proposals to guide development in the specific Local Authority area.	Implementation of the Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.