

NATURA IMPACT REPORT

IN SUPPORT OF THE
APPROPRIATE ASSESSMENT
OF THE
CLIFDEN LOCAL AREA PLAN
2018-2024

IN ACCORDANCE WITH THE REQUIREMENTS OF
ARTICLE 6(3) OF THE EU HABITATS DIRECTIVE

for: **Galway County Council**

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Table of Contents

1 Introduction	1
1.1 Background	1
1.2 Legislative Context	1
1.3 Guidance.....	2
1.4 Approach.....	3
1.5 Relationship between the Appropriate Assessment process and the Plan	4
2 Description of and background to the Clifden Local Area Plan 2018-2024	5
2.1 Galway County Development Plan 2015-2021 (As Varied).....	5
2.2 Clifden Local Area Plan 2018-2024.....	10
2.3 Relationship with other Relevant Plans and Programmes	11
3 Screening for Appropriate Assessment.....	13
3.1 Introduction to Screening	13
3.2 Identification of Relevant European Sites	14
3.3 Assessment Criteria	17
3.4 Other Plans and Programs	32
3.5 Conclusion.....	37
4 Stage 2 Appropriate Assessment	38
4.1 Introduction.....	38
4.2 Characterisation of European Sites Potentially Affected.....	38
4.3 Identifying and Characterising Potential Significant Effects.....	39
5 Mitigation Measures.....	55
5.1 Introduction.....	55
5.2 Measures incorporated into the text of the Clifden LAP	55
6 Conclusion	59

List of Tables

Table 2.1 Policies and Objectives contained within the Galway CDP 2015-2021 that relate to the protection of ecological processes	6
Table 3.1 European Sites within 15 km of the LAP boundary.....	16
Table 3.2 Screening of European Sites within 15 km of the LAP boundary.....	20
Table 3.3 Plans or projects within the Zone of Influence of the LAP that may have in-combination effects European Sites.....	33
Table 4.1 European Sites potentially affected by the LAP.....	38
Table 4.2 Characterisation of Potential Effects (on the QIs/SCIs of the European Sites brought forward from Stage 1) arising from the LAP; the assessment was made with regard to the SSCO's of the sites as provided by the NPWS	43
Table 5.1 Measures relevant to the protection of European Sites.....	56

List of Figures

Figure 3.1 European Sites within 15 km of the LAP boundary.....	15
Figure 3.2 Location of the Connemara Bog Complex SAC (002034) and the Twelve Bens/Garraun Complex SAC (002031) in relation to the LAP boundary.....	31

1 Introduction

1.1 Background

CAAS has been appointed by Galway County Council to prepare this Screening Report in support of the Appropriate Assessment (AA) of the Clifden Local Area Plan 2018-2024 (LAP) in accordance with the requirements of Article 6(3) of the EU 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").

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.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the European Sites at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations (in particular Part XAB of the Planning and Development (Amendment) Act 2010 and the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended) to ensure the ecological integrity of these sites. AA is an assessment of whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a European Site in view of the Site's conservation objectives.

1.2 Legislative Context

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.

The Habitats Directive provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. In Ireland, these are SACs and SPAs, designated under the Birds Directive, hereafter referred to as European Sites.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European Sites. Article 6(3) establishes the requirement for AA:

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

If, in spite of a negative assessment of the implications for the [Natura 2000] site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures

necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."

These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). These regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in judgements of the Court of Justice of the European Union (CJEU).

If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project may nevertheless be carried out for "Imperative Reasons of Overriding Public Interest" (IROPI), including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

1.3 Guidance

This NIR has been prepared in accordance with the following guidance:

- *AA of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, 2010.*
- *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.*
- *Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC: European Commission, 2000.*
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (EC 2001);*
- *Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. Office for Official Publications of the European Communities, Luxembourg (EC 2007).*
- *Flora (Protection) Order, 1999 (As amended 2015)*

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 Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives. The EPA Envision Map-viewer (www.epa.ie) and available reports were also reviewed.

Definitions of conservation status, integrity and significance used in this assessment are defined in accordance with 'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC' (EC, 2000).

- The conservation status of a natural habitat is defined as the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species;

- The conservation status of a species is defined as the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its population;
- The integrity of a European Site is defined as the coherence of the site's ecological structure and function, across its whole area, or the habitats, complex of habitats and/or populations of species for which the site is or will be classified; and
- Significant effect should be determined in relation to the specific features and environmental conditions of the protected site concerned by the plan or project, taking particular account of the site's conservation objectives.

1.4 Approach

There are four main stages in the AA process; the requirements for each depending on likely impacts to European Sites (SACs and SPAs).

Stage One: Screening

The process which 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 3.

Stage Three: Assessment of Alternative Solutions

The process which 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. First, the plan should aim to avoid any impacts on European Sites by identifying possible impacts early in the plan-making process and writing the plan in order to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the plan is still likely to result in impacts on European Sites, and no further practicable mitigation is possible, then it must be rejected. If no alternative solutions are identified and the plan is required for imperative reasons of overriding public interest (IROPI test) under Article 6(4) of the Habitats Directive, then compensation measures are required for any remaining adverse effect.

1.4.1 Source-Pathway-Receptor Model

Ecological impact assessment of potential effects on European Sites is conducted following a standard source-pathway-receptor 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 mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

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

In the interest of this report, receptors are the ecological features which 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 LAP provision which is known to have interactions with ecological processes. The pathways are any connections or links between the source and the receptor. This report determines if direct, indirect and cumulative adverse effects (however minor) will arise from the Plan.

1.4.2 Zone of Influence

Following the source-pathway-receptor process a Zone of Influence (ZOI) is determined based on the characteristics of the development (detailed in Section 3.2) and the foreseen distribution of likely effects through any pathways is identified. All European Sites within the ZOI are assessed with specific reference to the sensitive receptors of each site and pathways for effect that relate to the ecological integrity of the site.

1.5 Relationship between the Appropriate Assessment process and the Plan

AA is fully integrated with the various stages of the LAP preparation process in order to help to ensure that the Plan does not affect European Sites. The screening and the assessment of Plan provisions in the context of mitigation measures and potential effects on European Sites, has been an iterative process throughout each stage of the Plan-making process.

2 Description of and background to the Clifden Local Area Plan 2018-2024

2.1 Galway County Development Plan 2015-2021 (As Varied)

The Galway County Development Plan 2015-2021 (as varied) sets out an overall strategy for the proper planning and sustainable development of the functional area of Galway County Council. The Plan presents Galway County Council's outlook for future development of its administrative area up to 2021. It sets out the longer-term vision for the development of the County, while protecting and enhancing its environment through employing the principles of sustainable development in the policies and objectives set out therein. Local Area Plans have been or will be prepared for the towns/areas with a population over 1,500 persons; however, the County Development Plan remains the overarching Plan for the County. There have been three variations to the CDP adopted to date which include Variation No. 1, Variation No. 2 (b) and Variation No. 2 (a).

The LAP builds on the strategies, policies and objectives of the Galway County Development Plan, taking into account recent key development trends and national, regional and local policy developments. In particular, it also takes account of the increased emphasis on flooding, climate change, renewable energy and the need to support economic development. It also takes account of European Union (EU) requirements including the application of Strategic Environmental Assessment and AA to the Plan.

The County Development Plan was subject to SEA, AA and Strategic Flood Risk Assessment (SFRA). The Stage 2 AA for this Plan concluded that:

“Having incorporated mitigation measures, it is considered that the Plan will not have a significant effect on the integrity of the Natura 2000 Network¹.”

Provisions of the County Development Plan that relate to the protection of ecological processes are detailed on Table 2.1.

¹ Except as provided for in Section 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.

Table 2.1 Policies and Objectives contained within the Galway CDP 2015-2021 that relate to the protection of ecological processes

<p>Strategic Aim 10 – Heritage: Enhance and protect the built heritage and natural environment, including buildings, archaeology, landscape and biodiversity, within the County.</p>
<p>Objective DS 5 – Protection and Management of the Assets of the County Protect and manage the assets that contribute to the unique visual and environmental character and sense of identity of County Galway, and which underpin tourism, heritage, biodiversity and quality of life.</p>
<p>Objective DS 6 – Natura 2000 Network and Habitats Directive Assessment Protect European sites that form part of the Natura 2000 network (Including Special Protection Areas and Special Areas of Conservation) in accordance with the requirements in the EU Habitats Directive (92/43/EEC), EU Birds Directive (2009/147/EC), the Planning and Development (Amendment) Act 2010, the European Communities (Birds and Natural Habitats) Regulations 2011(SI No.477 of 2011) (and any subsequent amendments or updated legislation) and having due regard to the guidance in the AA Guidelines 2010 (and any updated or subsequent guidance). A plan or project (e.g. proposed development) within the Plan Area will only be authorized after the competent authority (Galway County Council) has ascertained, based on scientific evidence, Screening for AA, and/or a Habitats Directive Assessment where necessary, that: The Plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European Site (either individually or in combination with other plans or projects); or The Plan or project will have significant adverse effects on the integrity of any European Site (that does not host a priority natural habitat type/and or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000; or The Plan or project will have a significant adverse effect on the integrity of any European Site (that hosts a natural habitat type and/or a priority species) but there are no alternative solutions and the plan or project must nevertheless be carried out for imperative reasons for overriding public interest, restricted to reasons of human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest. In this case, it will be a requirement to follow procedures set out in legislation and agree and undertake all compensatory measures necessary to ensure the protection of the overall coherence of Natura 2000.</p>
<p>Objective DS 8 – Climate Change Galway County Council shall support the <i>National Climate Change Strategy</i> and follow on document <i>National Climate Change Adaptation Framework Building Resilience to Climate Change 2012</i>, on an ongoing basis through implementation of supporting objectives in this Plan, particularly those supporting the use of alternative and renewable energy sources, sustainable transport, air quality, biodiversity, green infrastructure, coastal zone management, flooding and soil erosion</p>
<p>Objective DS 9 Projects/Associated Improvement Works/Infrastructure and AA Ensure that proposed projects and any associated improvement works or associated infrastructure relating to renewable energy projects; water supply and abstraction; wastewater and discharges; flood alleviation and prevention; roads, power lines and telecommunications; and amenity and recreation provision are subject to AA where relevant.</p>
<p>Objective DS10- Impacts of Developments on Protected Sites Have regard to any impacts of development on or near existing and proposed Natural Heritage Areas, Special Protection Areas and Special Areas of Conservation, Nature Reserves, Ramsar Sites, Wildfowl Sanctuaries, Salmonid Waters, Refuges for Flora and Fauna, Connemara National Park, shellfish waters, freshwater pearl mussel catchments and any other designated sites including future designations.</p>
<p>Objective DS 13 - SEA Monitoring of the Plan Carry out SEA monitoring of the Plan to ensure that any potential significant environmental effects of implementing the plan are identified and can be addressed accordingly.</p>
<p>Objective CS 7 – Core Strategy and the Countryside/Rural Areas Galway County Council shall recognize the important role of the rural areas within the County and shall protect and support these areas through the careful management of its key assets, including its physical and environmental resources, while supporting appropriate development in a balanced and sustainable manner and in accordance with the relevant policies and objectives set out throughout the Plan.</p>
<p>Objective UHO 8 – Urban Design Promote the use of sustainable urban design principles and approaches that will help to create high quality built and natural environments appropriate to the context and landscape setting of the specific area, having regard to the guidance contained in the <i>Sustainable Residential Development in Urban Areas Guidelines 2009</i>, the accompanying <i>Urban Design Manual 2009</i> (or any updated version) and the <i>Design Manual for Urban Roads & Streets (2013)</i> (including any superseding document).</p>
<p>Objective EDT 25 – Wild Atlantic Way Support and facilitate the Wild Atlantic Way project in conjunction with the relevant stakeholders and Galway County Council will actively encourage the creation of spurs to link in with the Wild Atlantic Way as was intended, taking into account environmental sensitivities.</p>

<p>Objective TI 12 – Noise Require all new proposed development, which is considered to be noise sensitive within 300m of existing, new or planned national roads, or roadways with traffic volumes greater than 8,200AADT, to include a noise assessment and mitigation measures if necessary, with their planning application documentation. The cost of mitigation measures shall be borne by the developer. Mitigation measures in order to protect the noise environment of existing residential development will be facilitated or enforced as necessary.</p>
<p>Policy WS 5 - Water Quality Promote public awareness of water quality issues and the measures required to protect all waters including all surface water and groundwater bodies.</p>
<p>Objective WS 1 – Protection of Ground Waters Support the protection of groundwater resources and dependent wildlife/habitats in accordance with the Groundwater Directive 2006/118/EC, the European Communities Environmental Objectives (groundwater) Regulations, 2010 (S.I. No. 9 of 2010) or any updated legislation and the Groundwater Protection Scheme and source protection plans for water supplies.</p>
<p>Objective WW 1 - EU Policies and Directives Ensure that all wastewater generated is collected, treated and discharged after treatment in a safe and sustainable manner, having regard to the standards and requirements set out in EU and national legislation and guidance and subject to compliance with the provisions and objectives of the EU Water Framework Directive, relevant River Basin Management Plans, Urban Waste Water Directive and the EU Habitats Directive.</p>
<p>Objective WW 6 – Adherence to Environmental Standards Promote the provision of safe and secure wastewater infrastructure to ensure that the public is protected and that permitted development, is within the environmental carrying capacity and does not negatively impact on habitat quality or species diversity.</p>
<p>Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Maintain and enhance, as appropriate, existing surface water drainage systems in the County, ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments.</p>
<p>Objective WW 8 – Substandard Wastewater Treatment Plants Support and facilitate as appropriate the upgrading of substandard public wastewater treatment plants in order to comply with the provisions of the Urban Waste Water Treatment Regulations 2001 and 2004, the Waste Water Discharge (Authorization) Regulations 2007 and implement the relevant recommendations set out in the EPA document <i>Focus on Urban Waste Water Discharges in Ireland</i> (and any subsequent update).</p>
<p>Objective WW9 – Integrated Constructed Wetlands Galway County Council shall support the use of Integrated Constructed Wetlands (ICW) as a low cost and environmentally sustainable alternative having regard to the “Integrated Constructed Wetlands-Guidance Document for Farmyard Soiled Water and Domestic Wastewater Applications” as appropriate.</p>
<p>Objective CC 5 - An Ecosystems Approach and Land Use Galway County Council shall implement an ecosystems approach (holistic approach) to land use and land use change and ensure that climate change adaptation measures are taken into account in planning decisions. The Council shall also a) Have regard to any recommendations and forthcoming recommendations as outlined in the proposed National Raised Bog SAC Management Plan and the National Biodiversity Plan; b) Integrate climate risk into the review of the Biodiversity Action Plan for County Galway 2008 - 2013; c) Seek to control the spread of non-native and alien invasive species on land and water using new regulatory powers.</p>
<p>Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Maintain and enhance, as appropriate, the existing surface water drainage system in the County. Ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in all new developments. Surface water runoff from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and Sustainable Drainage Systems proposals.</p>
<p>Objective FL 3 - Protection of Waterbodies and Watercourses Protect waterbodies and watercourses within the County from inappropriate development, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains. This will include protection buffers in riverine, wetland and coastal areas as appropriate.</p>
<p>Policy NHB 1 – Natural Heritage and Biodiversity It is the policy of Galway County Council to support the protection, conservation and enhancement of natural heritage and biodiversity, including the protection of the integrity of European sites, that form part of the Natura 2000 network, the protection of Natural Heritage Areas proposed Natural Heritage Areas Ramsar Sites, Nature Reserves, Wild Fowl Sanctuaries and Connemara National Park (and other designated sites including any future designations) and the promotion of the development of a green/ecological network within the Plan Area, in order to support ecological functioning and connectivity, create opportunities in suitable locations for active and passive recreation and to structure and provide visual relief from the built environment.</p>
<p>Policy NHB 2 – Non-Designated Sites Recognize that nature conservation is not just confined to designated sites and acknowledge the need to protect non-designated habitats and landscapes and to conserve the biological diversity in</p>

the county.
<p>Policy NHB 3 – Green Infrastructure Protect existing green infrastructure and provide additional green infrastructure where possible such as green roof technology and energy efficiency pumps.</p>
<p>Policy NHB 4– Water Resources Protect, conserve and enhance the water resources of the county, including, rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland habitats and freshwater and water dependent species and seek to protect and conserve the quality, character and features of inland waterways by controlling developments close to navigable and non-navigable waterways.</p>
<p>Policy NHB 5 – Geological and Geo-Morphological Systems Protect, conserve and enhance important geological and geo-morphological systems in the county and seek to promote access to such sites where possible.</p>
<p>Policy NHB 6 – National Biodiversity Plan, Galway County Heritage Plan and Galway County Biodiversity Plan It is the policy of the Council to support the implementation of the <i>National Biodiversity Plan</i> and <i>Galway County Biodiversity Plan</i> and <i>Galway County Heritage Plan</i> in partnership with relevant stakeholder’s subject to available resources.</p>
<p>Policy NHB 7 - Invasive Species It is a policy of the Council to support measures for the prevention and eradication of invasive species. This will include the dissemination of information to raise public awareness, the adoption of codes of practices/standard biosecurity measures in normal Local Authority activities consultation with relevant stakeholders, the promotion of the use of native species in amenity planting and landscaping and the recording of invasive/native species as the need arises and resources permit.</p>
<p>Policy NHB 8 – National Parks and Wildlife Service (NPWS) Management Plans It shall be the policy of the Council to ensure that development takes into account relevant Management Plans prepared by NPWS for SACs and SPAs.</p>
<p>Objective NHB 1 – Protected Habitats and Species Support the protection of habitats and species listed in the Annexes to and/or covered by the EU Habitats Directive (92/43/EEC) (as amended) and Birds Directive (2009/147/EC), and regularly occurring-migratory birds and their habitats, and species protected under the Wildlife Acts 1976-2000 and the Flora Protection Order.</p>
<p>Objective NHB 2– Biodiversity and Ecological Networks Support the protection and enhancement of biodiversity and ecological connectivity within the Plan Area, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, stone walls, geological and geo-morphological systems, other landscape features and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of the Habitats Directive.</p>
<p>Objective NHB 3 – Water Resources Protect the water resources in the Plan Area, including rivers, streams, lakes, wetlands, springs, turloughs, surface water and groundwater quality, as well as surface waters, aquatic and wetland habitats and freshwater and water dependent species in accordance with the requirements and guidance in the EU <i>Water Framework Directive 2000 (2000/60/EC)</i>, the <i>European Union (Water Policy) Regulations 2003</i> (as amended), the <i>Western River Basin District Management Plan 2009- 2015</i>, <i>Shannon International River Basin Management Plan 2009-2015</i> and other relevant EU Directives, including associated national legislation and policy guidance (including any superseding versions of same) and also have regard to the Freshwater Pearl Mussel Sub-Basin Management Plans.</p>
<p>Objective NHB 4 – Geological and Geo-Morphological Systems Protect and conserve geological and geo-morphological systems, sites and features from inappropriate development that would detract from their heritage value and interpretation and ensure that any Plan or project affecting karst formations, eskers or other important geological and geo-morphological systems are adequately assessed with regard to their potential geophysical, hydrological or ecological impacts on the environment.</p>
<p>Objective NHB 5 – Control of Invasive and Alien Invasive Species Where the potential for spread of invasive species are identified as part of a development proposal the developer will be required to submit an invasive species management plan. A landscaping plan will be required for developments near water bodies and ensure that such plans do not include alien invasive species.</p>
<p>Objective NHB 6 – Protection of Bats and Bats Habitats Seek to protect bats and their roosts, their feeding areas, flight paths and commuting routes. Ensure that development proposals in areas which are potentially important for bats, including areas of woodland, linear features such as hedgerows, stone walls, watercourses and associated riparian vegetation which may provide migratory/foraging uses shall be subject to suitable assessment for potential impacts on bats. This will include an assessment of the cumulative loss of habitat or the impact on bat populations and activity in the area and may include a specific bat survey. Any assessment shall be carried out by a suitably qualified professional and where development is likely to result in significant adverse effects on bat populations or activity in the area, development will be prohibited or require mitigation and/or compensatory measures, as appropriate.</p>
<p>Objective NHB 7 – Eskers Assess applications for quarrying and other proposed developments that are in close proximity to eskers that have the potential to impact on their landscape, scientific or amenity value.</p>

<p>Objective NHB 8 – Coastal Zone It is an objective to protect the coastal zone through the following measures: Ensure that conservation works undertaken in coastal areas are in accordance with best practice and measures to protect the coast, the coastal edge and coastal habitats are supported; Seek to prevent the unauthorized removal of sand and related beach material; Protect, enhance and conserve beaches in the County from inappropriate development and seek to maintain the current status of the designated Blue Flag beaches and Green Coasts and to increase the number of beaches and coasts holding this status in the future; Facilitate an Integrated Coastal Zone Management approach to ensure the conservation, management and protection of man-made and natural resources of the coastal zone; Support the preparation of an Integrated Galway Bay Framework Management Plan by all relevant stakeholders to provide for the sustainable and integrated development of the Galway Bay Area in a coordinated manner.</p>
<p>Objective NHB 9 – Inland Waterways Protect the amenity and recreational value of navigable and non-navigable waterways.</p>
<p>Objective NHB 10 – Protection of the Coastal Zone Protect the amenity, character, visual, recreational, economic potential and environmental values of the coast. Ensure that natural coastal defenses including sand dunes, beaches and coastal wetlands are not compromised by inappropriate development. Conserve the character, quality and distinctiveness of seascapes.</p>
<p>Objective NHB 11 – Trees, Parkland/Woodland, Stone Walls and Hedgerows Protect important trees, tree clusters and hedgerows within the county and ensure that development proposals take cognisance of significant trees/tree stands. Ensure that all planting schemes use suitable native variety of trees, of Irish provenance. Seek to retain natural boundaries, including stone walls, hedgerows and tree boundaries, wherever possible and replace with a boundary type similar to the existing boundary where removal is unavoidable. Discourage the felling of mature trees to facilitate development and encourage tree surgery rather than felling where possible. All works to be carried out in accordance with the provisions of the Forestry Act, 1946.</p>
<p>Objective NHB12 - Soil/Ground Water Protection Developments shall ensure that adequate soil protection measures are undertaken, where appropriate, including investigations into the nature and extent of any soil/groundwater contamination.</p>
<p>Objective NHB 13 – NPWS & Integrated Management Plans Galway County Council shall seek to engage with and support the National Parks & Wildlife Service to ensure Integrated Management Plans are prepared for all Natura 2000 sites and ensure that that such plans are fully integrated with all land use and water management plans in the county, with the intention that such plans are practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations and with special regard to local communities.</p>
<p>Objective NHB 14 – Protection of Riparian Zones Protect the riparian zones of watercourse systems throughout the county, recognizing the benefits they provide in relation to flood risk management and their protection of the ecological integrity of watercourse systems and ensure they are considered in the land use zoning in Local Area Plans.</p>
<p>Policy RA 2 – Protection of sensitive areas Protect the amenity of scenic and environmentally sensitive areas and promote the knowledge and appreciation of the natural amenities of the County.</p>

2.2 Clifden Local Area Plan 2018-2024

This LAP is a land use plan and overall strategy for the development of Clifden covering the period 2018-2024.

The Vision of the Plan is: *'To promote the sustainable development of Clifden, as a prosperous town, providing a focus for future residential, economic & social development in west Connemara. Promoting the town as a visitor destination while preserving its unique historic identity, character and environmental quality, as well as improving its accessibility'.*

Key issues, considerations and challenges identified by the Plan include:

- **Common Vision:** A common strategic vision needs to be developed that provides a positive framework for future growth, consolidation and enhancement of the town in accordance with the principles of proper planning and sustainable development.
- **Core Strategy:** The Core Strategy in the Galway County Development Plan has identified a target population growth of up to 250 persons for Clifden through to 2021, which results in a requirement for 12.92ha of zoned land for residential purposes (based on 50% over-zoning). A key factor in the preparation of the Plan has been the determination of the best locations for residential land uses within the town to accommodate this future growth and to ensure residential development takes place in an orderly and sequential manner.
- **Population Growth:** Clifden has varied but continued population growth over the last two Census periods. Ensuring sustainable settlement patterns, including the provision of the necessary planning framework, to accommodate educational, community, leisure and recreational facilities to satisfactorily match the level of population growth, is a key issue in planning for the future.
- **Infrastructure and Sustainable Transportation:** Working towards ensuring that infrastructure is developed on an ongoing basis to service future developments in order to accommodate planned population growth, whilst ensuring compliance with the statutory obligations to achieve good water quality status under the EU Water Framework Directive and associated national legislation. Whilst the opportunities for public transport are limited in Clifden, there is scope to focus on promoting and facilitating the use of sustainable modes of transport, such as walking and cycling, in and around the town areas and along the Connemara Greenway. The reduction of car dependency and promoting Smarter Travel initiatives are also key considerations in the Local Area Plan process.
- **Economic Activity and Tourism:** Ensuring the enhancement of Clifden's role as a centre for employment for residents of both the town and wider hinterland, through maximising its tourism opportunity presented by its location in Connemara. It is important to foster and maintain local and small-scale businesses through protecting the vitality and vibrancy of the town centre, promoting and facilitating appropriate tourism ventures,
- **Statutory Planning Context:** Statutory plans, in particular the previous Local Area Plan for the town and the need for compliance and consistency with the current Galway County Development Plan 2015-2021 (as varied) and the Regional Planning Guidelines for the West Region 2010-2022 and emerging Regional Spatial & Economic Strategy.
- **Local Planning Context:** Local plans, strategies and studies, including: the Galway County Heritage and Biodiversity Plan 2017-2022; Galway Transportation and Planning Study 2002; Developing Sustainable Tourism in Galway: A Framework for Action 2003-2012; and Galway County Local Economic and Community Plan 2016-2022
- **Environmental Assessment:** Assessment of potential environmental impacts of the Local Area Plan, including a Strategic Environmental Assessment, Habitats Directive Assessment, the Strategic Flood Risk Assessment for County Galway and a Stage 2 Strategic Flood Risk Assessment for Clifden, while ensuring that Clifden remains an attractive place to work, live, visit and do business.
- **Heritage and Environment:** Promoting and facilitating appropriate growth of the town, while protecting the built, cultural and natural heritage of Clifden in accordance with applicable legislation and policy. This also includes consideration of the environmental designations adjacent to and within the plan boundary.

- Flooding: Flood risk issues are an important consideration in the preparation of the Local Area Plan, particularly in zoning lands for appropriate uses in flood risk areas, and the Local Area Plan is guided by the Stage 2 Strategic Flood Risk Assessment for the Clifden LAP which was carried out as part of the plan making process and aligns with the guidance contained within the document The Planning System and Flood Risk Management Guidelines for Planning Authorities Guidelines for Planning Authorities (2009), as updated and the DECLG Circular PL 2/2014.

2.3 Relationship with other Relevant Plans and Programmes

The LAP sits within a hierarchy of strategic actions such as plans and programmes. The LAP must comply with Galway CDP and relevant higher-level strategic actions and may, in turn, guide lower level strategic actions.

2.3.1 Ireland 2040 – Our Plan, the National Planning Framework

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 Planning Framework and accompanying National Development Plan share ten National Strategic Outcomes as follows:

1. Compact Growth
2. Enhanced Regional Accessibility
3. Strengthened Rural Economies and Communities
4. Sustainable Mobility
5. A Strong Economy, supported by Enterprise, Innovation and Skills
6. High-Quality International Connectivity
7. Enhanced Amenity and Heritage
8. Transition to a Low-Carbon and Climate-Resilient Society
9. Sustainable Management of Water and other Environmental Resources
10. Access to Quality Childcare, Education and Health Services

2.3.2 Regional Spatial Economic Strategy (Replacing Regional Planning Guidelines; to commence in 2018/2019 and will be adopted over lifetime of the Plan)

Regional Planning Guidelines (RPGs) provide long-term strategic planning frameworks and will be replaced by Regional Spatial and Economic Strategies (RSESs).

Each one of the three Regional Assemblies will prepare their own RSES, with the Northern and Western Regional Assembly, of which Galway County Council is part, responsible for the preparation of a RSES for the Northern and Western Region. 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.

2.3.3 Galway County Development Plan 2015-2021 (as varied)

The Galway CDP vision is to “enhance the quality of life of the people of Galway and maintain the County as a uniquely attractive place in which to live, work, invest and visit, harnessing the potential of the county’s competitive advantages in a sustainable and environmentally sensitive manner.”

2.3.4 Environmental Protection Objectives

The LAP is subject to a number of high-level environmental protection policies and objectives with which they must comply. Examples of Environmental Protection Objectives include the aims of the EU Habitats Directive which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States and the

purpose of the Water Framework Directive which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status.

3 Screening for Appropriate Assessment

3.1 Introduction to Screening

3.1.1 Background to Screening

This stage of the process identifies any likely significant effects to European Sites from a project or plan, either alone or in combination with other projects or plans. The screening phase was progressed in the following stages. A series of questions are asked during the Screening Stage of the AA process in order to determine:

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

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.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document 'Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC', paragraph 4.6(3) states:

"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

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.

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.

The screening stage of the AA takes account of the elements detailed above with regard to the details and characteristics of the project or plan to determine if potential for effects to the integrity of the European Site are likely. The characteristics of the Plan were constructed through an iterative process, as a result the European Sites which are screened below may differ from those of high-level plans, due to refinements in the methods/project details available.

3.1.2 Desktop Studies

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

- Identification of European Sites within 15km with identification of potential pathways links for specific sites (if relevant) greater than 15km from the LAP;

- Review of the NPWS site synopsis and conservation objectives for European Sites with identification of potential pathways from the LAP; and
- A series of ecological desktop studies were undertaken in May and November 2018. This included but is not limited to the collation of information on protected species including Bats, Otters, Bird species (including Annex I species), Annex II habitat types, protected and Red Data Book Flora species, invertebrates and amphibians. The results of these studies are included as part of the AA where they were deemed relevant to the European Sites and their QI's/SCI's.

3.2 Identification of Relevant European Sites

This section of the screening process describes the European Sites which exist within the Zone of Influence (ZOI) of the site. The DoEHLG (2009) Guidance on AA recommends a 15 km buffer zone to be considered. A review of all sites within the ZOI has allowed a determination to be made that in the absence of significant hydrological links the characteristics of the Proposed Material Alterations to the LAP will not impose effects beyond the 15 km ZOI.

European Sites that occur within 15km of the LAP are listed in Table 3.1 and illustrated in Figure 3.1 below. Details on the specific qualifying features and special conservation interests of each European Site are also identified in Table 3.1.

In order to determine the potential for effects from the LAP, information on the qualifying features, known vulnerabilities and threats to site integrity pertaining to any potentially affected European Sites was reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- *Ireland's Article 17 Report to the European Commission "Status of EU Protected Habitats and Species in Ireland" (NPWS, 2013);*
- *Site Synopses; and*
- *NATURA 2000 Standard Data Forms.*

The assessment takes consideration of the SSCOs of each of the sites within the ZOI. Since the conservation objectives for the European Sites focus on maintaining the favorable conservation condition of the QIs/SCIs of each site, the screening process concentrated on assessing the potential effects of the LAP against the QIs/SCIs of each site. The conservation objectives for each site were consulted throughout the assessment process.

The Habitats Directive establishes the requirement to assess potential effects of plans/projects on the qualifying interests, and conservation objectives (including structure and function) of designated European Sites (and, where relevant, non-qualifying interests that are important to the overall functioning of the site and its conservation objectives under Articles 10, and 12-16 of the Habitats Directive). Similarly, Article 4(4) of the Birds Directive identifies a requirement to consider special conservation interest species, pollution and the deterioration of bird habitats, which requires considerations beyond the footprints of designated areas.

The site-specific threats and vulnerabilities of each of the sites are detailed in Appendix I.

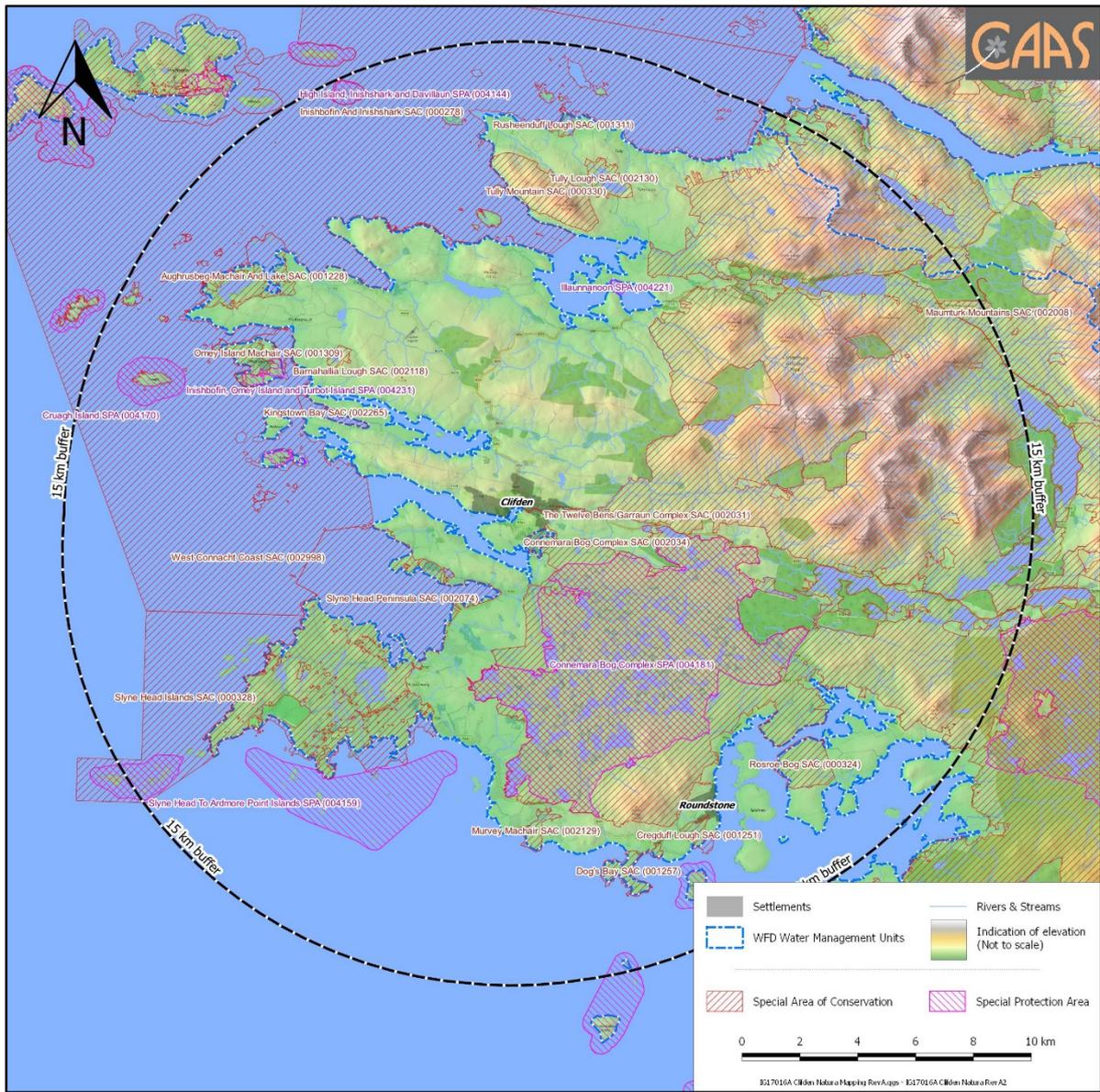


Figure 3.1 European Sites within 15 km of the LAP boundary

Table 3.1 European Sites within 15 km of the LAP boundary

Site Code	European Site	Distance (km)
002031	The Twelve Bens/Garraun Complex SAC	Within
002034	Connemara Bog Complex SAC	0
002074	Slyne Head Peninsula SAC	1.17
004181	Connemara Bog Complex SPA	1.78
002998	West Connacht Coast SAC	4.38
002265	Kingstown Bay SAC	5.37
004231	Inishbofin, Omey Island and Turbot Island SPA	7.26
002118	Barnahallia Lough SAC	6.95
000328	Slyne Head Islands SAC	6.98
004221	Illaunnaon SPA	7.10
004159	Slyne Head to Ardmore Point Islands SPA	6.98
000330	Tully Mountain SAC	8.73
002129	Murvey Machair SAC	8.90
001309	Omey Island Machair SAC	9.20
001228	Aughrusbeg Machair and Lake SAC	9.91
002130	Tully Lough SAC	9.99
000324	Rosroe Bog SAC	11.20
001251	Cregduff Lough SAC	10.90
001257	Dog's Bay SAC	10.92
004170	Cruagh Island SPA	12.12
001311	Rusheenduff Lough SAC	11.78
002008	Maumturk Mountains SAC	13.82
000278	Inishbofin and Inishshark SAC	14.02
004144	High Island, Inishshark and Davillaun SPA	14.04

3.3 Assessment Criteria

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

Under the Habitats Directive, Plans that are directly connected with or necessary to the management of a European Site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the plan, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the LAP is not the nature conservation management of the sites, but to establish a framework for the planned, co-ordinated and sustainable development of the Clifden area. Therefore, the LAP is not considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

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

The plan provides a framework for the sustainable development of the Clifden area. There are a number of environmental sensitivities within the area, the plan is considered as a holistic design and an assessment of effects indicates the potential effects relate to the following:

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

Clifden is an existing urban townland and the surrounding landscape is dominated by agriculture and upland montane habitats. The elements of the LAP with the highest potential to give rise to the effects indicated above are associated with construction phase elements of the implementation of the plan. The operational phase elements of the plan are consistent with the existing condition of the area. All policies and objectives are considered in this assessment with respect to the ecological integrity of each of the European Sites identified. Considering the sensitivities/vulnerabilities of the QIs and SCIs in relation to all potential sources for effects and potential pathways for such effects. Where sources and pathways for effects are identified potential effects will be assessed in relation to the SSCOs.

3.3.3 Identification of Potential Effects and Screening of Sites

This section documents the final stage of the screening process. It has used the information collected on the sensitivity of each European Site and describes any potential effects to the ecological integrity of European Sites resulting from the LAP. This assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for significant effects, a number of factors have been taken into account. Firstly, the sensitivity and reported threats to the European Site. Secondly, the individual elements of the LAP and the potential effect they may cause to the site were considered. The elements of the LAP with potential to cause effect to the integrity of European Sites are presented in Table 3.2 below.

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 between activities of the LAP, and the site to be screened;
- Where the site is located at such a distance from LAP 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 LAP.

The elements detailed above were considered with specific reference to each of the European Sites identified in Section 3.2, and the SSCOs, with respect to the potential effects identified in Section 3.3.2.

Sources considered in the compilation of Table 3.1:

- NPWS (2015) Conservation Objectives: Connemara Bog Complex SAC 002034. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2015) Conservation Objectives: Slyne Head Peninsula SAC 002074. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2018) Conservation objectives for Connemara Bog Complex SPA [004181]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht
- NPWS (2015) Conservation Objectives: West Connacht Coast SAC 002998. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2011) Conservation Objectives: Kingstown Bay SAC 002265. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. NPWS (2018) Conservation objectives for Inishbofin, Omev Island and Turbot Island SPA [004231]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.
- NPWS (2018) Conservation objectives for Barnahallia Lough SAC [002118]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.
- NPWS (2012) Conservation Objectives: Slyne Head Islands SAC 000328. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht
- NPWS (2018) Conservation objectives for Illaunnaon SPA [004221]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht. NPWS (2018) Conservation objectives for Slyne Head to Ardmore Point Islands SPA [004159]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.
- NPWS (2018) Conservation objectives for Tully Mountain SAC [000330]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.
- NPWS (2017) Conservation Objectives: Murvey Machair SAC 002129. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. NPWS (2017) Conservation Objectives: Omev Island Machair SAC 001309. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. NPWS (2018) Conservation objectives for Aughrusbeg Machair and Lake SAC [001228]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.
- NPWS (2018) Conservation objectives for Tully Lough SAC [002130]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht. NPWS (2017) Conservation Objectives: Rosroe Bog SAC 000324. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- NPWS (2018) Conservation objectives for Cregduff Lough SAC [001251]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.
- NPWS (2017) Conservation Objectives: Dog's Bay SAC 001257. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. NPWS (2018) Conservation objectives for Cruagh Island SPA [004170]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht. NPWS (2018) Conservation objectives for Rusheenduff Lough SAC [001311]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.
- NPWS (2017) Conservation Objectives: Maumturk Mountains SAC 002008. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. NPWS (2015) Conservation Objectives: Inishbofin and Inishshark SAC 000278. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

- NPWS (2018) Conservation objectives for High Island, Inishshark and Davillaun SPA [004144]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht. Sources considered in this table: NPWS (2017) Conservation Objectives: The Twelve Bens/Garraun Complex SAC 002031. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- NPWS (2013) The Status of Protected EU Habitats and Species in Ireland. Overview Volume 1. Unpublished Report, National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. Dublin, Ireland.

Table 3.2 Screening of European Sites within 15 km of the LAP boundary

Site Code	European Site	Distance (km)	Qualifying Features (Qualifying Interests and Special Conservation Interests)	Potential Effects	Pathway for Effects	Potential for Significant Effects
002031	The Twelve Bens/Garraun Complex SAC	Within	[3110] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions, diffuse pollution, changes to abiotic condition, invasive species, degradation due to drainage/mechanical removal of peat and nutrient losses. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[3130] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i>	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions, diffuse pollution, changes to abiotic condition, invasive species, degradation due to drainage/mechanical removal of peat and nutrient losses. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[4060] Alpine and Boreal heaths	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . Alpine and Boreal heath are sensitive to direct interactions and management practices, specifically in relation to grazing as well as changes to hydrological characteristics. Air quality, specifically Nitrogen input and Acidification, is a pressure that is identified as low importance for the QI. There are no maps provided by the NPWS in relation to the distribution of this habitat feature. The targets and attributes for this habitat feature relate to soil pH, habitat distribution, composition/structure/function of vegetation communities, population distinctiveness and drainage regime. The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP introduces potential sources for effects that could influence the community or hydrological dynamics of the SAC. Therefore, further assessment is required.	Yes	Yes
			[7130] Blanket bogs (* if active bog)	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . Blanket bogs are sensitive to direct interactions and management practices, specifically in relation to drainage as well as changes to hydrological characteristics and invasive species. There are no maps provided by the NPWS in relation to the distribution of this habitat feature.	Yes	Yes

² NPWS (2013). The Status of Protected EU Habitats and Species in Ireland. Overview Volume 1. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland. Editor: Deirdre Lynn

³ NPWS (2013) The Status of EU Protected Habitats and Species in Ireland. Habitat Assessments Volume 2. Version 1.1. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

			<p>The targets and attributes for this habitat feature relate to soil pH, habitat distribution, composition/structure/function of vegetation communities, population distinctiveness and drainage regime.</p> <p>The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP introduces potential sources for effects that could influence the community or hydrological dynamics of the SAC. Therefore, further assessment is required.</p>		
		[7150] Depressions on peat substrates of the <i>Rhynchosporion</i>	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. The SSCOs identify an objective to restore the favourable conservation condition of Depressions on peat substrates of the Rhynchosporion in The Twelve Bens/Garraun Complex SAC. Depressions on peat substrates of the <i>Rhynchosporion</i> are sensitive to direct interactions and management practices, specifically in relation to drainage as well as changes to hydrological characteristics. There are no maps provided by the NPWS in relation to the distribution of this habitat feature.</p> <p>The targets and attributes for this habitat feature relate to soil pH, habitat distribution, composition/structure/function of vegetation communities, population distinctiveness and drainage regime.</p> <p>The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP introduces potential sources for effects that could influence the community or hydrological dynamics of the SAC. Therefore, further assessment is required.</p>	Yes	Yes
		[8110] Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. Siliceous scree of the montane are sensitive to direct interactions and management practices. There are no sources for effects to the targets and attributes of the conservation objectives for this habitat feature and there are also no pathways for effects.</p>	No	No
		[8210] Calcareous rocky slopes with chasmophytic vegetation	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. Calcareous rocky slopes with chasmophytic vegetation are sensitive to direct interactions and management practices. There are no sources for effects to the targets and attributes of the conservation objectives for this habitat feature and there are also no pathways for effects.</p>	No	No
		[8220] Siliceous rocky slopes with chasmophytic vegetation	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. Siliceous rocky slopes with chasmophytic vegetation are sensitive to direct interactions and management practices. There are no sources for effects to the targets and attributes of the conservation objectives for this habitat feature and there are also no pathways for effects.</p>	No	No
		[91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. Oak woodlands are sensitive to direct interactions and management practices. There are no sources for effects to the targets and attributes of the conservation objectives for this habitat feature and there are also no pathways for effects.</p>	No	No
		[1029] <i>Margaritifera</i>	<p>The freshwater pearl mussel is identified in the SSCOs to be present in the Dowros River</p>	No	No

			<i>margaritifera</i> (Freshwater Pearl Mussel)	which is hydrologically isolated from the Plan area. The SSCOs also identifies a wider 'Freshwater Pearl Mussel Catchment' which is hydrologically isolated from the Plan area. Therefore, there are no pathways for effects to the specific targets and attributes of the conservation objectives of the QI species.		
			[1106] Atlantic Salmon (<i>Salmo salar</i>)	This species has potential to occur within the LAP area. The main pressures and threats that relate to this species have been categorised by the NPWS ² . This species is sensitive to water quality effects and the marine phase of the species lifecycle is of concern for the conservation of the species. The SSCOs detail an objective to maintain the favourable conservation condition of Atlantic Salmon in The Twelve Ben/Garraun Complex. The purpose of this assessment is to identify if the implementation of the Proposed Material Alterations will adversely affect the ecological integrity of the SAC with respect to its SSCOs. The LAP is <u>not</u> required to contribute to the targets and attributes of the SSCOs. The targets and attributes for this species relate to the abundance and population dynamics of the species. The water quality target is to be at least Q4 at all sites monitored by the EPA. The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP introduces potential sources for effects to the SSCOs of this QI and there are pathways for direct effects. Therefore, further consideration is required.	Yes	Yes
			[1335] <i>Lutra lutra</i> (Otter)	The SSCOs detail an objective to maintain the favourable conservation condition of Otter. The targets for the species are to have no significant decline in habitat or barriers to movement. The maps associated with the SSCOs show that there are no habitats identified in the LAP area. There will be no direct land take and there are no barriers to the free movement of otter proposed in the LAP. Therefore, there are no sources with pathways for affects to the QI.	No	No
			[1833] <i>Najas flexilis</i> (Slender Naiad)	The slender newt is identified in the SSCO supporting document to be present upstream of the Plan Area in an upland lake. This species is sensitive to land drainage, application of agri-chemicals, hedgerow and scrub removal and pond / wetland loss etc ⁴ . As the known distribution of the SAC population is upstream of the LAP there are no pathways for effects. This assessment was made with specific reference to the targets and attributes of the conservation objectives of the QI species which relate to habitat area.	No	No
002034	Connemara Bog Complex SAC	0	[1150] Coastal Lagoons*	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . The NPWS maps identify the closest Coastal Lagoon and Reef system to be at 'Salt Lake' along the R341 which is over 1km from Clifden. Both reef systems and coastal lagoons are sensitive to hydrological interactions and alterations to the physical composition and structure of vegetation communities. There are no sources within the LAP that will affect the physical structure or management at these sites. However, there are indirect hydrological and airborne pathways for effects. Therefore, further assessment is required.	Yes	Yes
			[1170] Reefs		Yes	Yes
			[3110] Oligotrophic Waters containing very few minerals		No	No
			[3130] Oligotrophic to Mesotrophic Standing		No	No

⁴ Irish Wildlife Trust (2013) National Smooth Newt Survey Report

			Waters	to drainage and nutrient losses. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.		
			[3160] Dystrophic Lakes	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions and degradation due to drainage and nutrient losses. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[3260] Floating River Vegetation	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions and degradation due to drainage and nutrient losses. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[4010] Wet Heath	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions and direct habitat management such as drainage or fire management. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[4030] Dry Heath	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions and direct habitat management such as drainage or fire management. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[6410] Molinia Meadows	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . The conservation objective for this habitat feature is to maintain the favourable conservation condition of Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) in Connemara Bog Complex SAC. This is to be achieved through maintaining the community dynamics including composition and structure of vegetation and soil interactions. There are no maps provided by the NPWS for the distribution of this habitat within the SAC. This habitat is known to be sensitive to encroachment and direct management activities. This is a terrestrial habitat that is not reliant on surface water interactions. Given the uncertainty as to the location of the existing distribution of the habitat and the proximity to the site, further consideration is required.	Unknown	Unknown
			[7130] Blanket Bogs (Active)*	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions and direct habitat management such as drainage or fire management. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[7140] Transition Mires	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions and direct habitat management such as drainage or fire management. The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.	No	No
			[7150] Rhynchosporion Vegetation	The main pressures and threats that relate to this habitat feature have been categorised by the NPWS ²³ . This habitat is sensitive to hydrological interactions and direct habitat management such as drainage or fire management. There are no maps provided by the	Yes	Unknown

			<p>NPWS in relation to the distribution of this habitat type.</p> <p>The targets and attributes for this habitat feature relate to soil pH, habitat distribution, composition/structure/function of vegetation communities, population distinctiveness and drainage regime.</p> <p>The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP introduces potential sources for effects that could influence the community or hydrological dynamics of the SAC. Therefore, further assessment is required.</p>		
		[7230] Alkaline Fens	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. This habitat is sensitive to hydrological interactions and direct habitat management such as drainage or fire management.</p> <p>The SSCOs provided by the NPWS identify these habitat features to be upstream of the LAP. Therefore, there are no pathways for effects given the known sensitivities of the QI.</p>	No	No
		[91A0] Old Oak Woodlands	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. Oak woodlands are sensitive to direct interactions and management practices. There are no sources for effects to the targets and attributes of the conservation objectives for this habitat feature and there are also no pathways for effects.</p>	No	No
		[1065] Marsh Fritillary (<i>Euphydryas aurinia</i>)	<p>This is a terrestrial species which is present in coastal and inland habitats. The targets for the species are to maintain or increase area of suitable habitat, proof of breeding and no decline in the species distribution. There are no policies and or objectives within the Proposed Material Alterations that will impose effects to terrestrial systems beyond the footprint of the LAP itself.</p>	No	No
		[1106] Atlantic Salmon (<i>Salmo salar</i>)	<p>The main pressures and threats that relate to this species have been categorised by the NPWS². This species has potential to occur within the LAP area. This species is sensitive to water quality effects and the marine phase of the species lifecycle is of concern for the conservation of the species. The SSCOs detail an objective to maintain the favourable conservation condition of Atlantic Salmon in Connemara Bog Complex. The purpose of this assessment is to identify if the implementation of the Proposed Material Alterations will adversely affect the ecological integrity of the SAC with respect to its SSCOs. The LAP is <u>not</u> required to contribute to the targets and attributes of the SSCOs.</p> <p>The targets and attributes for this species relate to the abundance and population dynamics of the species. The water quality target is to be at least Q4 at all sites monitored by the EPA. The LAP is directly adjacent to the SAC which runs along a 500m stretch of the east boundary. The LAP introduces potential sources for effects to the SSCOs of this QI and there are pathways for direct effects. Therefore, further consideration is required.</p>	Yes	Yes
		[1355] Otter (<i>Lutra lutra</i>)	<p>The SSCOs detail an objective to maintain the favourable conservation condition of Otter. The targets for the species are to have no significant decline in habitat or barriers to movement. The maps associated with the SSCOs show that there are no habitats identified in the LAP area. There will be no direct land take and there are no barriers to the free movement of otter proposed in the LAP. Therefore, there are no sources with pathways for affects to the QI.</p>	No	No
		[1833] Slender Naiad <i>Najas flexilis</i>	<p>The slender newt is identified in the SSCOs to be present upstream of the Plan Area in lakes. This species is sensitive to land drainage, application of agri-chemicals, hedgerow</p>	No	No

				and scrub removal and pond / wetland loss etc ⁵ . As the known distribution of the SAC population is upstream of the LAP there are no pathways for effects. This assessment was made with specific reference to the targets and attributes of the conservation objectives of the QI species which relate to habitat area.		
002074	Slyne Head Peninsula SAC	1.17	[1150] Coastal Lagoons* [1160] Large Shallow Inlets and Bays [1170] Reefs [1210] Annual Vegetation of Drift Lines [1220] Perennial Vegetation of Stony Banks [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2110] Embryonic Shifting Dunes [2120] Marram Dunes (White Dunes) [21A0] Machairs* [3110] Oligotrophic Waters containing very few minerals [3130] Oligotrophic to Mesotrophic Standing Waters [3140] Hard Water Lakes [4030] Dry Heath [5130] Juniper Scrub [6210] Orchid-rich Calcareous Grassland*	The threats to the site identified by the NPWS (see Appendix I) are related to on site management issues such as agriculture on heath and grassland habitats. Aquaculture and housing developments within the SAC are of key concern for the SAC. These threats are all localised land use issues, as the LAP is outside the boundary for the SAC the LAP will not have any effects in this regard. There are indirect hydrological pathways for effects, therefore following the precautionary principle further consideration is required.	Yes	Unknown
004181	Connemara Bog Complex SPA	1.78	[A017] Cormorant (<i>Phalacrocorax carbo</i>); [A098] Merlin (<i>Falco columbarius</i>); [A140] Golden Plover (<i>Pluvialis apricaria</i>); [A182] Common Gull	There are no site-specific threats identified by the NPWS and the SSCOs are generic. There will be no direct effects that will arise due to the implementation of the Plan due to the distances between the LAP and the SPA. Bird species are particularly sensitive to disturbances, however the SHN published a Review of Disturbance Distances in Selected Bird Species which indicates distances exceeding 1km are not significant when considering effects. In addition to this, the LAP does not contain provisions for any works which may introduce flight collision risks for birds.	No	No

⁵ Irish Wildlife Trust (2013) National Smooth Newt Survey Report

			<i>(Larus canus)</i>	There are no pathways for potential effects to the hydrological condition of the SPA. Therefore, there are no sources for effects that could interact with the Site.		
002998	West Connacht Coast SAC	4.38	[1349] Common Bottlenose Dolphin (<i>Tursiops truncatus</i>)	There are no site-specific threats identified by the NPWS, and the SSCOs relate to the disturbance and habitat suitability effects. The targets and attributes for this species relate to the species range, distribution and available habitat. The SAC is downstream of the LAP and has an indirect hydrological pathway for effects through the Owenglin River which runs along the border. There are no direct Hydrological links, and no direct pathways for effects. Following the precautionary principle further consideration is required.	Indirect	Unknown
002265	Kingstown Bay SAC	5.37	[1160] Large Shallow Inlets and Bays	Large Shallow inlets and Bays contain highly sensitive species including maerl and eel grass, which can be affected by fishing and aquaculture. There are no policies or objectives that effect on site management activities of the site. Potential development in the vicinity of the SAC, or with direct pathways for effects have been identified. The LAP introduces potential sources for effects that could influence the community or hydrological dynamics of the SAC. Therefore, further assessment is required.	Yes	Unknown
004231	Inishbofin, Omev Island and Turbot Island SPA	7.26	[A122] Corncrake (<i>Crex crex</i>)	There are no site-specific threats identified by the NPWS and the SSCOs are generic. There will be no direct effects that will arise due to the implementation of the Plan due to the distances between the LAP and the SPA. Bird species are particularly sensitive to disturbances, however the SHN published a Review of Disturbance Distances in Selected Bird Species which indicate d distances exceeding 1km are not significant when considering effects. In addition to this, the LAP does not contain provisions for any works which may introduce flight collision risks for birds. Therefore, there are no sources for effects to the conservation objectives of the SPA.	No	No
002118	Barnahallia Lough SAC	6.95	[3130] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or Isoeto-Nanojuncetea [1833] Slender Naiad (<i>Najas flexilis</i>)	The NPWS identify that the lake is sensitive to nutrient enrichment derived from agricultural activities. The SSCOs for the site are generic. There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.	No	No
000328	Slyne Head Islands SAC	6.98	[1170] Reefs [1364] Grey Seal (<i>Halichoerus grypus</i>)	No site-specific threats were identified by the NPWS. The SSCO identify objectives relating to the extent and quality of habitat as well as interactions with breeding behaviours of the grey seal. Grey seals are sensitive to threats such as entanglement, direct disturbance, prey competition, pollution and habitat degradation. Reefs are vulnerable to fishing pressures in deep waters ² . There are there are no sources or pathways for effects that interact with the known sensitivities/vulnerabilities of the QIs. This assessment was made considering the targets and attributes of the SSCOs for Grey Seals and Reef habitats.	No	No
004221	Illaunnaon SPA	7.10	[A191] Sandwich Tern (<i>Sterna sandvicensis</i>)	There are no site-specific threats identified by the NPWS and the SSCOs are generic. There will be no direct effects that will arise due to the implementation of the Plan due to the distances between the LAP and the SPA. Bird species are particularly sensitive to disturbances, however the SHN published a Review of Disturbance Distances in Selected Bird Species which indicate d distances	No	No

				<p>exceeding 1km are not significant when considering effects. In addition to this, the LAP does not contain provisions for any works which may introduce flight collision risks for birds. There are no hydrological links from the LAP to the SPA, and there are no policies or objectives that effect on site management activities of the site. There are no known flightpaths between the populations of the SPA and the LAP boundary area.</p> <p>There are no sources with pathways for effects to the ecological integrity of the SPA.</p>		
004159	Slyne Head to Ardmore Point Islands SPA	6.98	<p>[A045] Barnacle Goose (<i>Branta leucopsis</i>);</p> <p>[A191] Sandwich Tern (<i>Sterna sandvicensis</i>);</p> <p>[A194] Arctic Tern (<i>Sterna paradisaea</i>);</p> <p>[A195] Little Tern (<i>Sterna albifrons</i>)</p>	<p>There are no site-specific threats identified by the NPWS and the SSCOs are generic. There will be no direct effects that will arise due to the implementation of the Plan due to the distances between the LAP and the SPA.</p> <p>Bird species are particularly sensitive to disturbances, however the SHN published a Review of Disturbance Distances in Selected Bird Species which indicated distances exceeding 1km are not significant when considering effects. In addition to this, the LAP does not contain provisions for any works which may introduce flight collision risks for birds. There are no hydrological links from the LAP to the SPA, and there are no policies or objectives that effect on site management activities of the site. There are no known flightpaths between the populations of the SPA and the LAP boundary area.</p> <p>There are no sources with pathways for effects to the ecological integrity of the SPA.</p>	No	No
000330	Tully Mountain SAC	8.73	<p>[4030] European dry heaths</p> <p>[4060] Alpine and Boreal heaths</p>	<p>The threats to the site identified by the NPWS (see Appendix I) are grazing and natural erosion.</p> <p>The conservation objectives relate to the distribution and composition of the protected features and communities of the site.</p> <p>There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.</p>	No	No
002129	Murvey Machair SAC	8.90	<p>[21A0] Machairs* [1395] Petalwort (<i>Petalophyllum ralfsii</i>)</p>	<p>The threats to the site identified by the NPWS (see Appendix I) are related to on site management issues such as grazing, quarrying, peat cutting and water Abstraction. These threats are localised.</p> <p>The conservation objectives are generic and relate to the maintenance/restoration of favourable conservation condition of the designated features.</p> <p>There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.</p>	No	No
001309	Omev Island Machair SAC	9.20	<p>[21A0] Machairs (* in Ireland)</p> <p>[3140] Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara spp.</i></p> <p>[1395] Petalwort (<i>Petalophyllum ralfsii</i>)</p>	<p>The threats to the site identified by the NPWS (see Appendix I) are grazing and natural erosion.</p> <p>The conservation objectives relate to the distribution and composition of the protected features and communities of the site. As well as turbidity levels and hydrological characteristics.</p> <p>There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.</p>	No	No
001228	Aughrusbeg Machair and Lake SAC	9.91	<p>Oligotrophic water [3110]</p> <p>Northern Atlantic wet heaths [4010]</p>	<p>The main pressures and threats that relate to this habitat feature have been categorised by the NPWS²³. These habitats are sensitive to hydrological interactions, diffuse pollution, changes to abiotic condition, invasive species, degradation due to drainage/mechanical removal of peat and nutrient losses.</p> <p>No site-specific threats were identified by the NPWS.</p> <p>The conservation objectives are generic and relate to the maintenance/restoration of</p>	No	No

				<p>favourable conservation condition of the designated features.</p> <p>There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.</p>		
002130	Tully Lough SAC	9.99	<p>Oligotrophic to mesotrophic standing waters [3130] Slender Naiad [1833]</p>	<p>The main pressures and threats that relate to Oligotrophic to mesotrophic standing waters have been categorised by the NPWS²³. This habitat is sensitive to hydrological interactions, diffuse pollution, changes to abiotic condition, invasive species, degradation due to drainage/mechanical removal of peat and nutrient losses. Newts are sensitive to habitat management, fragmentation and effects to hydrological condition.</p> <p>The main site-specific threats identified by the NPWS are further agricultural intensification, leading to loss of bog and wet grassland habitats surrounding the lake, and ultimately to eutrophication of the lake. These threats are localised.</p> <p>The conservation objectives are generic and relate to the maintenance/restoration of favourable conservation condition of the designated features.</p> <p>There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.</p>	No	No
000324	Rosroe Bog SAC	11.20	<p>Blanket bog (active)* [7130] <i>Rhynchosporion</i> depressions [7150]</p>	<p>The threats to the site identified by the NPWS (see Appendix I) are turf-cutting and over-grazing. These are localised effects and there are no sources for effects such as these detailed within the LAP.</p> <p>The conservation objectives relate to the distribution and composition of the protected features and communities of the site.</p> <p>There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.</p>	No	No
001251	Cregduff Lough SAC	10.90	<p>Blanket bog (active)* [7130] <i>Rhynchosporion</i> depressions [7150]</p>	<p>The threats to the site identified by the NPWS (see Appendix I) are over-grazing by domestic livestock and rabbits, and intensive visitor pressure during the summer. These are localised effects and there are no sources for effects such as these detailed within the LAP.</p> <p>The conservation objectives relate to the distribution and composition of the protected features and communities of the site.</p> <p>There are no hydrological links from the LAP to the SAC, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SAC.</p>	No	No
001257	Dog's Bay SAC	10.92	<p>Annual Vegetation of Drift Lines [1210] Embryonic Shifting Dunes [2110] Marram Dunes (White Dunes) [2120] Fixed Dunes (Grey Dunes) * [2130]</p>	<p>The threats to the site identified by the NPWS (see Appendix I) are turf-cutting and over-grazing. These are localised effects and there are no sources for effects such as these detailed within the LAP.</p> <p>The conservation objectives relate to the distribution and composition of the protected features and communities of the site as well as sediment levels.</p> <p>There are no sources for effects to the ecological integrity of the SAC and no pathways for effects between the LAP that will interact with the SAC.</p>	No	No
004170	Cruagh Island SPA	12.12	<p>Manx Shearwater (<i>Puffinus puffinus</i>); Barnacle Goose (<i>Branta leucopsis</i>)</p>	<p>There are no site-specific threats identified by the NPWS and the SSCOs are generic. There will be no direct effects that will arise due to the implementation of the Plan due to the distances between the LAP and the SPA.</p> <p>Bird species are particularly sensitive to disturbances, however the SHN published a</p>	No	No

				<p>Review of Disturbance Distances in Selected Bird Species which indicated distances exceeding 1km are not significant when considering effects. In addition to this, the LAP does not contain provisions for any works which may introduce flight collision risks for birds.</p> <p>There are no hydrological links from the LAP to the SPA, and there are no policies or objectives that effect on site management activities of the site. There are no sources with pathways for effects to the ecological integrity of the SPA.</p>		
001311	Rusheenduff Lough SAC	11.78	<p>Oligotrophic to mesotrophic standing waters [3130] Slender Naiad [1833]</p>	<p>The main pressures and threats that relate to Oligotrophic to mesotrophic standing waters have been categorised by the NPWS²³. This habitat is sensitive to hydrological interactions, diffuse pollution, changes to abiotic condition, invasive species, degradation due to drainage/mechanical removal of peat and nutrient losses. Newts are sensitive to habitat management, fragmentation and effects to hydrological condition.</p> <p>The NPWS identify hydrological condition to be the greatest threat to the SAC and the SSCOs provided for the site are generic. There will be no effects that will arise due to the implementation of the Plan due to the distances and the absence of a direct hydrological pathway for effect between the LAP and the SAC.</p>	No	No
002008	Maumturk Mountains SAC	13.82	<p>Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010] Alpine and Boreal heaths [4060] Blanket bogs (* if active bog) [7130] Depressions on peat substrates of the <i>Rhynchosporion</i> [7150] Siliceous rocky slopes with chasmophytic vegetation [8220] Atlantic Salmon (<i>Salmo salar</i>) [1106] Slender Naiad (<i>Najas flexilis</i>) [1833]</p>	<p>The main damaging activities and threats identified by the NPWS to the Maumturk Mountains are overgrazing, peat cutting and afforestation. These are localised effects and there are no sources for these effects within the LAP.</p> <p>The conservation objectives detail objectives relating to the maintenance of vegetation structure. For aquatic features the SSCOs detail objectives relating to the maintenance of macrophyte and phytoplankton communities which rely on hydrological characteristics and water quality. In addition to this there is a focus on fringe habitats.</p> <p>There are no direct hydrological pathways between the LAP and no sources for effects to the direct land use management of the site. Therefore, the implementation of the Plan will not result in significant effects to the ecological integrity of the SAC.</p>	No	No
000278	Inishbofin and Inishshark SAC	14.02	<p>Coastal lagoons [1150] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] Northern Atlantic wet heaths with <i>Erica</i></p>	<p>The threats to the site identified by the NPWS (see Appendix I) are turf-cutting and overgrazing. These are localised effects and there are no sources for effects such as these detailed within the LAP.</p> <p>The conservation objectives relate to the distribution and composition of the protected features and communities of the site.</p> <p>There are no sources for effects to the ecological integrity of the SAC and no pathways for effects between the LAP that will interact with the SAC.</p>	No	No

			<i>tetralix</i> [4010] European dry heaths [4030] Grey Seal (<i>Halichoerus grypus</i>) [1364]			
004144	High Island, Inishshark and Davillaun SPA	14.04	Fulmar (<i>Fulmarus glacialis</i>) [A009] Barnacle Goose (<i>Branta leucopsis</i>) [A045] Arctic Tern (<i>Sterna paradisaea</i>) [A194]	There are no site-specific threats identified by the NPWS and the SSCOs for the site are generic. Bird species are particularly sensitive to disturbances, however the SHN published a Review of Disturbance Distances in Selected Bird Species which indicate d distances exceeding 1km are not significant when considering effects. In addition to this, the LAP does not contain provisions for any works which may introduce flight collision risks for birds. Therefore, there are no sources for effects to the conservation objectives of the SPA. There are no sources with pathways for effects to the ecological integrity of the SPA.	No	No

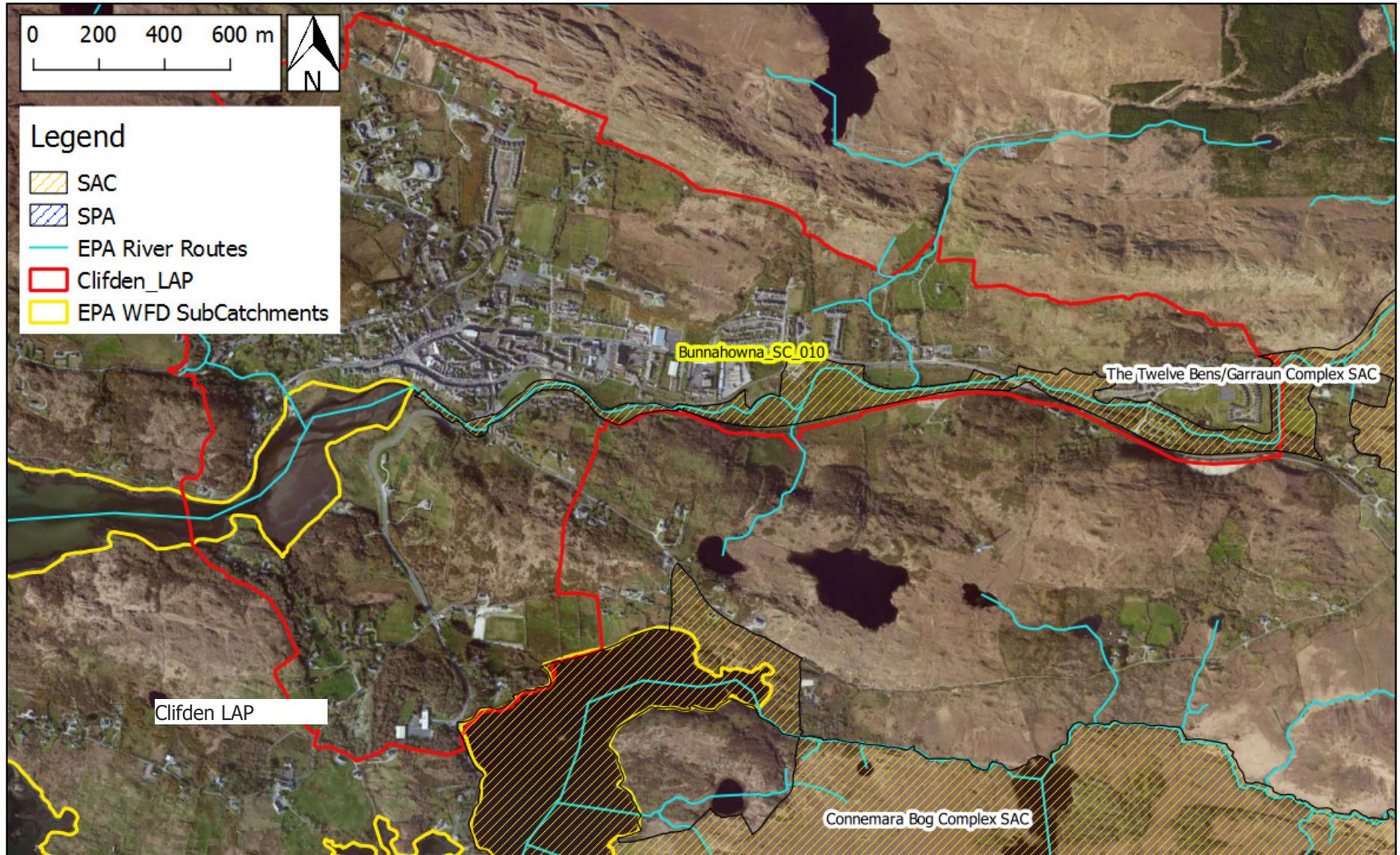


Figure 3.2 Location of the Connemara Bog Complex SAC (002034) and the Twelve Bens/Garraun Complex SAC (002031) in relation to the LAP boundary

3.4 Other Plans and Programs

Article 6(3) of the Habitats Directive requires an assessment of a plan to consider other plans or programmes that might, in combinations with the plan or project, have the potential to adversely impact upon European Sites. Table 3.3 outlines plans that may interact with the LAP to cause in-combination effects to European Sites. The plans are listed according to a spatial hierarchy of National, Regional/Local Projects and Plans, as follows:

- Ireland 2040 - Our Plan, the National Planning Framework
- Grid 25
- Energy Policy framework 2007-2020, Governments White Paper
- Irish Water’s Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan 2014-2016
- Regional Planning Guidelines for the West Region 2010 – 2022, to be replaced by Regional Spatial and Economic Strategy
- Galway City Area Transport Strategy 2016
- Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)
- Ireland’s First National Cycle Policy Framework (2009)
- Mayo County Development Plan 2014-2020
- Roscommon County Development Plan 2016-2022
- Offaly County Development Plan 2014-2020
- North Tipperary County Development Plan 2010 – 2016(as extended)
- Clare County Development Plan 2017-2023
- Galway City Council Development Plan 2017-2023
- County Galway Wind Energy Strategy
- Tuam Local Area Plan 2018-2024 and existing Plan 2011 as extended
- Headford Local Area Plan 2015-2021
- Portumna Local Area Plan 2016-2022
- Ballinasloe Local Area Plan 2015-2021
- Athenry Local Area Plan 2012-2022
- Oranmore Local Area Plan 2012-2022
- Gort Local Area Plan 2013-2023

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

Table 3.3 Plans or projects within the Zone of Influence of the LAP that may have in-combination effects European Sites

Plan or project	Status	Overview	Possible significant effects from plan or project	Is there a risk of in-combination effects	Possible significant in-combination effects
Ireland 2040 - Our Plan, the National Planning Framework	Published	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.	This Framework was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.	Potential in-combination effect may arise where there is a requirement to provide for new infrastructure or where new development occurs. Provision of infrastructure/development may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation	No, The mitigation measures contained within both documents prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these documents will not be significant.
Grid 25	Published	Grid25 is a high-level strategy outlining how EirGrid intends to undertake the development of the electricity transmission grid in the short, medium and longer terms, to support a long-term sustainable and reliable electricity supply. The Grid25 strategy thereby seeks to implement the provisions of the 2007 Government White Paper on Energy - "Delivering a Sustainable Energy Future for Ireland" in terms of development of electricity transmission infrastructure. The Grid25 Implementation Programme (IP) is a practical strategic overview of how the early stages of Grid25 are intended to be implemented.	This plan was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.	Potential in-combination effects may arise where there is a requirement to provide for new electrical infrastructure or where associated development occurs. Provision of infrastructure/development may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation	No, The mitigation measures contained within both plans prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant
Energy Policy framework 2007-2020, Governments White Paper	Published	This policy states that the Government is committed to delivering a significant growth in renewable energy as a contribution to fuel diversity in power generation with a 2020 target of 33% electricity consumption	This plan was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.	Potential in-combination effects may arise where there is a requirement to provide for new wind energy infrastructure or where new associated development occurs. Provision of infrastructure/development may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation	No, The mitigation measures contained within both plans prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant.

<p>Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan 2014-2016</p>	<p>Published</p>	<p>This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.</p>	<p>This plan was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.</p>	<p>Potential in-combination effects may arise where there is a requirement to provide for new water and waste water infrastructure and capacity. Meeting additional potable water demands and waste water treatment demands arising from the proposed increase in population has the potential to adversely affect, in the case of abstractions from and effluent discharges to surface waters, the ecological status of surface waters and, in the case of groundwater abstractions, the quantitative status of groundwater. Such demands would occur in-combination with those in adjoining counties. Adverse effects on the ecological status of surface waters and on the quantitative status of groundwater would have the potential to impact upon protected species and habitats. Provision of infrastructure and increases in capacity may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation</p>	<p>No, The mitigation measures contained within both plans prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant.</p>
Regional					
<p>Regional Planning Guidelines for the West Region 2010 – 2022, to be replaced by Regional Spatial and Economic Strategy</p>	<p>Published</p>	<p>Regional Planning Guidelines (RPGs) provide long-term strategic planning frameworks and will be replaced by Regional Spatial and Economic Strategies (RSESs). Each one of the three Regional Assemblies will prepare their own RSES, with the Northern and Western Regional Assembly, of which Galway County Council is part, responsible for the preparation of a RSES for the Northern and Western Region. 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.</p>	<p>The Guidelines were subject to SEA and AA which incorporated robust mitigation measures into the Guidelines to minimise effects.</p>	<p>Potential in-combination effects may arise where there is a requirement to provide for new infrastructure or where new development occurs. Provision of infrastructure/development may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation</p>	<p>No, The mitigation measures contained within both plans prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant.</p>

<p>Galway City Area Transport Strategy 2016</p> <p>Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)</p> <p>Ireland’s First National Cycle Policy Framework (2009)</p>	<p>Published</p>	<p>Outlines policies for how sustainable travel and transport systems can be achieved to create a connected city region driven by smarter mobility.</p>	<p>These plans was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.</p>	<p>Potential for in-combination effects may arise where there is a requirement to provide for new transport infrastructure, or increase capacity of existing infrastructure/services. Provisions for the development of transport infrastructure/associated development may potentially result in:</p> <p>Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation</p>	<p>No, The mitigation measures contained within these plans and the LAP itself prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant.</p>
Local					
<p>Mayo County Development Plan 2014-2020 Roscommon County Development Plan 2016-2022 Offaly County Development Plan 2014-2020 North Tipperary County Development Plan 2010 – 2016(as extended) Clare County Development Plan 2017-2023 Galway City Council Development Plan 2017-2023 (as varied)</p>	<p>Published</p>	<p>Overall strategies for the proper planning and sustainable development of the administrative area of the relevant Local Authorities.</p>	<p>These plans were subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.</p>	<p>Galway shares its boundary with a number of counties. Furthermore, a number of European sites are located in more than one county. Similar development plans are in existence throughout the region, accordingly these plans acting alone or in combination can have a cumulative impact on European sites located within County Galway. Provision of infrastructure or where new development occurs may result in:</p> <p>Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation</p>	<p>No, The mitigation measures contained within these plans and the LAP itself prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant.</p>
<p>Co. Galway Wind Energy Strategy</p>	<p>Published</p>	<p>The Strategy supports a plan led approach to wind energy development in County Galway and sets out a) Strategic Areas, b) Acceptable in Principle Areas, and c) areas Open for Consideration.</p>	<p>This plan was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.</p>	<p>Potential in-combination impacts may arise where there is a requirement to provide for new infrastructure. Provision of infrastructure may result in:</p> <p>Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation</p>	<p>No, The mitigation measures contained within both plans prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant.</p>

Appropriate Assessment of the Clifden Local Area Plan 2018-2024

<p>Tuam Local Area Plan 2018-2024 and existing Plan 2011 as extended Headford Local Area Plan 2015-2021 Portumna Local Area Plan 2016-2022 Ballinasloe Local Area Plan 2015-2021 Athenry LAP 2012-2022 Oranmore Local Area Plan 2012-2022 Gort LAP 2013-2023</p>	<p>Published</p>	<p>Overall strategies for the proper planning and sustainable development of the administrative area of the relevant Local Authorities.</p>	<p>These plans were subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.</p>	<p>There are various Local Area Plans in force within County Galway. These contribute towards the framework for proper planning sustainable development in the County. Provision of infrastructure or where new development occurs may result in: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation</p>	<p>No, The mitigation measures contained within these plans and the LAP itself prioritise the avoidance of effects where possible and provide measures to minimise effects. In combination effects from project which arise from the implementation of these plans will not be significant.</p>
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3.5 Conclusion

The likely effects that could arise from the Clifden Local Area Plan 2018-2024 have been examined in the context of a number of 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 LAP:

- Is not directly connected with or necessary to the management of a European Site; and
- May have significant impacts on any European Site.

Therefore, applying the precautionary principle and in accordance with Article 6(3) of the Habitats Directive, a Stage 2 AA is required (see Section 4 of this report).

4 Stage 2 Appropriate Assessment

4.1 Introduction

The main objective of the Stage 2 AA is to determine whether the LAP would result in significant adverse impacts on the integrity of any European Site with respect to the site's structure, function, and/or conservation objectives.

The Stage 1 AA Screening presented above has identified five European Sites with potential to be affected by the LAP (see Table 4.1). Therefore, taking a precautionary approach, Stage 2 AA is required. The potential adverse effects considered at this stage will either be effects occurring as a result of the implementation of the LAP alone or in-combination with other plans, programmes, and/or projects.

Detailed information relevant to the sites that has been reviewed to inform the AA includes the following:

- *NPWS Site Synopsis*
- *Natura 2000 Standard Data Form*
- *Conservation Objectives and supporting documents*

Table 4.1 European Sites potentially affected by the LAP.

Site Code	European Site	Distance (km)
002031	The Twelve Bens/Garraun Complex SAC	Within
002034	Connemara Bog Complex SAC	0
002074	Slyne Head Peninsula SAC	1.17
002998	West Connacht Coast SAC	4.38
002265	Kingstown Bay SAC	5.37

4.2 Characterisation of European Sites Potentially Affected

The Appropriate Assessment Screening identified five European Sites with pathway receptors for potential effects. Therefore, it is necessary to characterize each of these sites and the sensitivities of their qualifying interests, special conservation interests or their conservation objectives.

Appendix I characterises each of the qualifying features of the six European Sites brought forward from Stage 1 (Table 4.1). These are described in context of each of the sites' vulnerabilities in each of these sites' characterisations were derived from the NPWS website⁶.

⁶ NPWS (2016), last accessed 20th November 2018; <https://www.npws.ie/protected-sites>

4.3 Identifying and Characterising Potential Significant Effects

The following parameters are described when characterising impacts (following CIEEM (2016; 2018), EPA (2002) and NRA (2009)):

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

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

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

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

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

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

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

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

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

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

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

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

Generic Conservation Objectives for SACs have been provided as follows:

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

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

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

4.3.1 Identification of Potential Effects

Potential impacts from the LAP which have, alone and/or in combination, been identified to result in adverse effects upon the QI's/SCI's or integrity of European Sites. Ecological impact assessment of potential impacts on European Sites is conducted utilizing a standard source-pathway-resource process; where, all three elements of this mechanism must be in place to establish an effect arising.

As outlined in the European Commission Environment DG document "*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*", impacts that could potentially occur through the implementation of the LAP can be categorised under a number of headings:

- Loss / reduction of habitat area (e.g. due to the development of new projects)
- Disturbance to Key Species (e.g. increased public access to protected sites, or during the construction phase of infrastructure projects)
- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value such as decrease in water quality / quantity (e.g. through inadequate wastewater treatment, run-off of pollutants during construction and operation of developments, agricultural runoff)

Each of these elements is considered below with reference to the QI's/SCI's of all of the European Sites brought forward from Stage 1 of the AA process. A detailed analysis of each site individually can be found below in Table 4.2.

The LAP contributes towards the framework for sustainable development within Clifden. The LAP also prescribes particular locations (site specific) of developments of infrastructure. Overall, the LAP, in combination with other plans and programmes, underpins the development of housing, waste water treatment, tourism, communities and the town center with supporting transport, water, energy, and communication infrastructure within the Clifden area.

4.3.1.1 Reduction of Habitat Area

Small areas of the LAP boundary overlap with the The Twelve Bens/Garraun Complex SAC as shown in Figure 3.2. The policies and objectives of the plan, such as Objective DS 3, Objective NH 2 and Objective NH 5, aim to support the protection of all European Sites and detail the need for all lower tiered projects to conduct a site-specific AA. These mitigation measures will ensure that there will be no effects to the reduction of Habitat Area of any European Site as a result of the implementation of the plan.

4.3.1.2 Fragmentation

Habitat fragmentation is an issue for biodiversity, the Clifden area is already a highly urbanised area with limited available habitat. The plan contains policies and objectives that focus on the protection of habitat connectivity and ensure that no barriers to the free movement of protected species are introduced.

- Objective DS 3 – European Sites Network and Habitats Directive Assessment
- Objective UD 4 – Green Network and Landscaping
- Policy NH 1 – Natural Heritage, Landscape and Environment
- Objective NH 1 – European Sites
- Objective NH 2 – Protected Habitats and Species

- Objective NH 3 – Natural Heritage Areas and Proposed Natural Heritage Areas
- Objective NH 4 – Impact Assessments
- Objective NH 5 – Biodiversity & Ecological Networks
- Objective NH 6 – Water Resources
- Objective NH 7 – Wetlands, Springs, Rivers and Streams
- Objective NH 8 – Riparian Zones
- Objective NH 9 – Trees and Hedgerows
- Objective NH 13 – Construction Environmental Management Plan

These mitigation measures will prioritise the avoidance of effects and ensure that when site specific information is known about a project. These policies highlight the importance of ecological features such as riparian zones (NH8) and hedgerows (NH9) which act as linear pathways across the landscape. An emphasis is placed on the protection of these features within the LAP to ensure the connectivity of habitats, the LAP also recognises the need for ecological networks (NH5). The need for construction environmental management plans within the LAP area on large scale projects also identifies the need to protect the landscape from short term effects and have regard to connectivity throughout the construction phase of such projects.

4.3.1.3 Disturbance to Key Species

The Twelve Bens/Garraun Complex SAC is designated for a hydrological characteristic, terrestrial habitat features, aquatic species and the lesser horseshoe bat. The known lesser horseshoe bat roosts within the SAC are more than 4.2km from the LAP boundary, which is the known home range of the species. Therefore, there are no pathways for effects to the conservation objectives of the species. No direct land take or reduction of designated habitat will be permitted under the plan as per Objective DS 3, Objective NH 2 and Objective NH 5. Hydrological condition will be maintained through the following measures:

- Objective NH 6 – Water Resources
- Objective NH 7 – Wetlands, Springs, Rivers and Streams
- Objective NH 8 – Riparian Zones
- Objective DS 7 – Flood Risk Management and Assessment
- Objective DS 8 – Climate Change & Adaptation
- Objective LU 9 – Constrained Land Use Zone (CL)
- Objective LU 11 – Flood Risk Areas and Land Use Zones
- Policy FL 1 – Flood Risk Management
- Objective FL 1 – Flood Risk Management and Assessment
- Objective FL 2 – Flood Zones and Appropriate Land Uses
- Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones
- Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment
- Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment
- Objective FL 6 – Pluvial and Groundwater Flood Risk
- Objective FL 7 – New and Emerging Data
- Objective FL 8 – Protection of Water Bodies and Watercourses
- Objective FL 9 – Arterial Drainage Scheme
- Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions
- DM Guideline FL 1 – Flood Zones and Appropriate Land Uses
- DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones
- DM Guideline WQ 1 – Water Bodies and Watercourses

These policies and objectives provide additional measures to protect the ecological integrity of European Sites in conjunction with those contained within the existing CDP. There are no spawning grounds of the aquatic species identified within the sections of the SAC that runs through Clifden. There is potential for the QI species to be present on site. The Clifden area is highly urbanised, the LAP sets out a development framework for the development of the area in line with the existing condition. Therefore, the operational phase is expected to be consistent with the current receiving

environment. Anthropogenic disturbance to key species will be associated with construction phase elements of projects which are temporary effects. The need for construction environmental management plans within the LAP area on large scale projects also identifies the need to protect the landscape from short term effects and have regard to connectivity throughout the construction phase of such projects.

4.3.1.4 Changes of Indicators of Conservation Value

Water quality is a key indicator of conservation value will be mitigated through the following objectives:

Measures from the Local Area Plan

- Objective NH 6 – Water Resources
- Objective NH 7 – Wetlands, Springs, Rivers and Streams
- Objective NH 8 – Riparian Zones
- Objective NH 13 – Construction Environmental Management Plan
- Objective DS 7 – Flood Risk Management and Assessment
- Objective DS 8 – Climate Change & Adaptation
- Objective LU 9 – Constrained Land Use Zone (CL)
- Objective LU 11 – Flood Risk Areas and Land Use Zones
- Policy FL 1 – Flood Risk Management
- Objective FL 1 – Flood Risk Management and Assessment
- Objective FL 2 – Flood Zones and Appropriate Land Uses
- Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones
- Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment
- Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment
- Objective FL 6 – Pluvial and Groundwater Flood Risk
- Objective FL 7 – New and Emerging Data
- Objective FL 8 – Protection of Water Bodies and Watercourses
- Objective FL 9 – Arterial Drainage Scheme
- Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions
- DM Guideline FL 1 – Flood Zones and Appropriate Land Uses
- DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones
- DM Guideline WQ 1 – Water Bodies and Watercourses
- Objective ENV 3 – Air Quality
- Objective ENV 4 – Air Purification

Measures from the Galway County Development Plan (as varied)

- Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5
- Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1
- DM Standard 27: Surface Water Drainage & Flooding

These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.

Table 4.2 Characterisation of Potential Effects (on the QIs/SCIs of the European Sites brought forward from Stage 1) arising from the LAP; the assessment was made with regard to the SSCO's of the sites as provided by the NPWS

Site Code	European Site	Distance (km)	Qualifying Features (Qualifying Interests and Special Conservation Interests)	Potential Effects	Residual Effects Once Mitigated
002031	The Twelve Bens/Garraun Complex SAC	Within	[4060] Alpine and Boreal heaths	<p>The SSCO for this habitat identifies the targets and attributes relate to the distribution/land cover, community structure and diversity. This habitat type is sensitive to direct management activities such as drainage, agriculture, scrub management etc.</p> <p>There are a number of objectives within the plan to ensure that no direct land take or physical alterations of Alpine and Boreal heaths will occur through the implementation of the Plan; such as:</p> <ul style="list-style-type: none"> • Objective DS 3; • Objective NH 2; and • Objective NH 5. <p>Indirect effects to the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification 	No

				<p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.</p>	
			<p>[7130] Blanket bogs (* if active bog)</p>	<p>The supporting document for this habitat identifies the community structure of blanket bogs at variant conditions. It identifies the issues/threats to the vegetation structure to be browsing/grazing, burning and <i>Sphagnum</i> condition. <i>Sphagnum</i> is a genus of peat forming bryophytes. The issues/threats identified for the physical structure of the habitat are identified as ground disturbance, drainage and/or erosion.</p> <p>There are a number of objectives within the plan to ensure that no direct land take or physical alterations of Blanket Bogs will occur through the implementation of the Plan; such as:</p> <ul style="list-style-type: none"> • Objective DS 3; • Objective NH 2; and • Objective NH 5. <p>Indirect effects to the vegetation of the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood 	

			<ul style="list-style-type: none"> • Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted</p>	
		<p>[7150] Depressions on peat substrates of the <i>Rhynchosporion</i></p>	<p>The SSCO for this habitat identifies the targets and attributes relate to the community structure of soil ph. Soil pH is influenced by atmospheric and hydrological conditions. It identifies the issues/threats to the vegetation structure and function as well as interactions with the physical structure of the habitat such as ground disturbance, drainage and/or erosion.</p> <p>There are a number of objectives within the plan to ensure that no direct land take or physical alterations of Depressions on peat substrates of the <i>Rhynchosporion</i> will occur through the implementation of the Plan; such as:</p> <ul style="list-style-type: none"> • Objective DS 3; • Objective NH 2; and • Objective NH 5. 	<p>Indirect effects to the vegetation of the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management</p>

				<p>and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc.</p>	
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				<p>All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted</p>
			<p>[1106] Atlantic Salmon (<i>Salmo salar</i>)</p>	<p>There are no instream works proposed within the LAP. There are policies and objectives contained within the plan to ensure no direct land take will occur due to the implementation of the plan. There is a 10 m protection buffer surrounding all water courses within the LAP (NH8) which will protect bankside vegetation to ensure shelter is maintained which supports juvenile spawning and protection. Salmon are specifically mentioned as a species with specific protection under NH2 in the LAP. There are no provisions in the plan that will directly impact the physical characteristics of the available suitable habitat for the species.</p> <p>Indirect effects to the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7,

				<p>WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1</p> <ul style="list-style-type: none"> DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.</p>	
002034	Connemara Bog Complex SAC	0	<p>[1150] Coastal Lagoons*</p> <p>[1170] Reefs</p>	<p>The SAC is outside of the LAP, all of the policies and objectives relating to land use management are contained within the LAP boundary.</p> <p>Indirect effects to the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> Objective NH 6 – Water Resources Objective NH 7 – Wetlands, Springs, Rivers and Streams Objective NH 8 – Riparian Zones Objective NH 13 – Construction Environmental Management Plan Objective DS 7 – Flood Risk Management and Assessment Objective DS 8 – Climate Change & Adaptation Objective LU 9 – Constrained Land Use Zone (CL) Objective LU 11 – Flood Risk Areas and Land Use Zones Policy FL 1 – Flood Risk Management Objective FL 1 – Flood Risk Management and Assessment Objective FL 2 – Flood Zones and Appropriate Land Uses Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment Objective FL 6 – Pluvial and Groundwater Flood Risk Objective FL 7 – New and Emerging Data Objective FL 8 – Protection of Water Bodies and Watercourses Objective FL 9 – Arterial Drainage Scheme Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions DM Guideline FL 1 – Flood Zones and Appropriate Land Uses DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones DM Guideline WQ 1 – Water Bodies and Watercourses 	No

			<ul style="list-style-type: none"> Objective ENV 3 – Air Quality Objective ENV 4 – Air Purification <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.</p>	
		[6410] Molinia Meadows	<p>This is a terrestrial habitat type and the LAP boundary is adjacent to the estuary to the south of Clifden, and shares no boarders with any potential Rhynchosporion Vegetation habitat. Drying out of bog habitats and direct land use management activities and the primary threats/vulnerabilities of this QI. There are no sources for potential effects to the direct land use of the site. The hydrological pathways were examined with respect to the distribution of this habitat. It can be seen in Figure 3.2 that there are no hydrological pathways to the terrestrial attributes of this SAC. Therefore, there are no sources or pathways for effects to the ecological integrity of this QI.</p>	
		[7150] Rhynchosporion Vegetation	<p>This is a terrestrial habitat type and the LAP boundary is adjacent to the estuary to the south of Clifden, and shares no boarders with any potential Rhynchosporion Vegetation habitat. Drying out of bog habitats and direct land use management activities and the primary threats/vulnerabilities of this QI. There are no sources for potential effects to the direct land use of the site. The hydrological pathways were examined with respect to the distribution of this habitat. It can be seen in Figure 3.2 that there are no hydrological pathways to the terrestrial attributes of this SAC. Therefore, there are no sources or pathways for effects to the ecological integrity of this QI.</p>	
		[1106] Atlantic Salmon (<i>Salmo salar</i>)	<p>Salmon are both a marine and freshwater species that have a complex life cycle. Key characteristics of the species ecological resource requirements are: flow regime, prey availability, connectivity of habitat, availability of juvenile spawning grounds and water quality. The SAC is outside of the LAP, all of the policies and objectives relating to land use management are contained within the LAP boundary. Therefore, there will be no direct effect to the QI taking into account the sensitivities indicated above.</p> <p>Indirect effects to the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p>	

				<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.</p>	
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002074	Slyne Head Peninsula SAC	1.17	<p>[1150] Coastal Lagoons* [1160] Large Shallow Inlets and Bays [1170] Reefs [1210] Annual Vegetation of Drift Lines [1220] Perennial Vegetation of Stony Banks [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2110] Embryonic Shifting Dunes [2120] Marram Dunes (White Dunes) [21A0] Machairs* [3110] Oligotrophic Waters containing very few minerals [3130] Oligotrophic to Mesotrophic Standing Waters [3140] Hard Water Lakes [4030] Dry Heath [5130] Juniper Scrub [6210] Orchid-rich Calcareous Grassland*</p>	<p>The habitat types for which this site is designated are known to be sensitive to hydrological interactions and direct land use management. There are no policies or objectives that provide a source for potential effects to direct land use management of the SAC. There are also no pathways for effects to any of the terrestrial habitats of the SAC.</p> <p>Indirect effects to the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of</p>	No
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				contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.	
002998	West Connacht Coast SAC	4.38	[1349] Common Bottlenose Dolphin (<i>Tursiops truncatus</i>)	<p>Dolphin are marine species. Key characteristics of the species ecological resource requirements are: prey availability, competition, threats from entanglement and other conflicts with angling. Therefore, there are no sources for direct effect to the QI taking into account the sensitivities indicated above.</p> <p>Indirect effects to the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification 	No

				<p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.</p>	
002265	Kingstown Bay SAC	5.37	[1160] Large Shallow Inlets and Bays	<p>This habitat type has known sensitive receptors to hydrological interactions and direct land use management. There are no policies or objectives that provide a source for potential effects to direct land use management of the SAC.</p> <p>Indirect effects to the QI that could result due to the implementation of the plan include effects to water quality through vectors such as emissions, improper waste management and/or surface water run-off. Measures are required to ensure that the hydrological condition of the SAC is maintained. The following mitigation measures are contained within the LAP and higher-level CDP:</p> <p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 13 – Construction Environmental Management Plan • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management 	No

				<p>Functions</p> <ul style="list-style-type: none"> • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding <p>These policies and objectives will limit development in close proximity to existing water courses through the protection of the riparian zone. They will ensure that unforeseen flood events do not cause significant effects as no lands are zoned for unsuitable land uses, which minimizes risk of contamination. Policies ENV 3 and 4 promotes the preservation of best ambient air quality and encourages purification efforts within the town. These policies ensure that EPA Air Quality standards must be met within the LAP area. The use construction environmental management plans on large scale projects will reduce the potential for adverse effects at project level during construction. All lower tiered plans will be subject to their own AA considerations and flood risk assessments. The LAP provides details on the need for the protection of water bodies and watercourses, suds schemes etc. All of these mitigation measures will ensure the protection of water quality and ensure no project will be permitted during the course of the LAP lifespan that will have significant adverse effects to water quality.</p>	
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5 Mitigation Measures

5.1 Introduction

This section outlines measures that need to be incorporated into the LAP in order to mitigate against potential effects to European Sites as identified above.

The LAP was being prepared in an iterative manner whereby the Plan and AA documents have informed subsequent versions of the other. These mitigation measures also considered all submissions made during the public consultation during the plan making process.

In order to demonstrate that there will be no adverse effects from implementation of the Plan, mitigation measures have been devised to be incorporated into the text of the Plan, described below.

5.2 Measures incorporated into the text of the Clifden LAP

As outlined in Section 4.3 of this assessment a number of significant effects that could affect habitats and species have been identified. No zoning or specific projects are proposed by the LAP that would result in direct effects on any European Site, where the land use zoning objectives overlap with European Sites, the provisions within the LAP such as Objective DS 3, Objective NH 2 and Objective NH 5. Measures have been included in the policies and objectives of the LAP that will ensure effects to the ecological integrity of European Sites are avoided. The LAP sits within a hierarchy of development plans in County Galway, it is a lower tier plan under the Galway County Development Plan 2015 – 2021 (as varied), and therefore mitigation measures included in the Galway CDP also apply to development and land use in the LAP area.

As a result of the AA and SEA of the LAP, a number of policies and objectives have been developed and existing policies amended to strengthen the protection afforded to European Sites. Amongst other things, these policies and objectives will ensure that appropriate assessments are carried out on all developments. This will ensure that project level effects, which cannot be predicted at the Plan level, will be mitigated and impacts on protected sites through inappropriate development will be avoided. The LAP will also comply with measures listed in Section 9 (Table 9.1) of the SEA Environmental Report, which will further mitigate potential adverse effects on the environment. Those measures relevant to the safeguarding all European Sites are reproduced in Table 5.1.

Table 5.1 Measures relevant to the protection of European Sites

Likely Significant Effect, if unmitigated	Mitigation Measures, including:
All	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective LU 12 - Galway County Development Plan 2009-2015 (as varied)^[1] • Objective NH 13 - Construction Environmental Management Plan • Objective TI 4 – Road Schemes/Road Improvements
<p>Arising from both construction and operation of development and associated infrastructure:</p> <ul style="list-style-type: none"> • Loss of/damage to biodiversity in designated sites (including European Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna; • Habitat loss, fragmentation and deterioration, including patch size and edge effects; and • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. 	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective DS 3 – European Sites Network and Habitats Directive Assessment • Objective ED 9 – Tourism Development • Objective UD 4 – Green Network and Landscaping • Policy NH 1 – Natural Heritage, Landscape and Environment • Objective NH 1 – European Sites • Objective NH 2 – Protected Habitats and Species • Objective NH 3 – Natural Heritage Areas and Proposed Natural Heritage Areas • Objective NH 4 – Impact Assessments • Objective NH 5 – Biodiversity & Ecological Networks • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective NH 9 – Trees and Hedgerows • Objective NH 10 – Geological and Geo-morphological Systems • Objective NH 11 – Control of Invasive and Alien Species • Objective NH 12 – Consultation with Environmental Authorities • DM Guideline NH 1 – Control of Invasive Species & Bio-Security Measures • Objective NH 13 - Construction Environmental Management Plan <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 1, NHB 2, NHB 3, NHB 5, NHB 6 and NHB 7 • Objectives DS 6, DS 9, EQ1, EQ 4, ICT 1, NHB 1, NHB 2, NHB 4, NHB 5, NHB 6, NHB 7, NHB 11, NHB 13, AFF 6 and DS10 <p>Also see various measures providing for populations in rural and supporting areas.</p>
<p>Potential interactions if effects upon environmental vectors such as water and air are not mitigated</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective TI 7 – Noise • Objective ENV 5 – Radon <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policy CC 8 • Objectives TI 12 and EQ 2 <p>Also see measures related to soil, water quality, flooding, wastewater treatment and drinking water supply and quality.</p>

^[1] Objective LU 12 - Galway County Development Plan 2009-2015 (as varied): The provisions of the Galway County Development Plan 2009-2015 (as varied), including the measures contributing towards environmental protection and sustainability (some of these measures are repeated in Section 9 of the SEA Environmental Report that accompanies this Plan) shall be complied with by any future development.

Likely Significant Effect, if unmitigated	Mitigation Measures, including:
Damage to the hydrogeological and ecological function of the soil resource	<p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Objective NHB12 Soil/Ground Water Protection • Objective NH 10 – Geological and Geo-morphological Systems <p>Also see measures related to water quality and wastewater treatment.</p>
<p>Adverse impacts upon the status of water bodies arising from changes in quality, flow and/or morphology</p> <p>Increase in the risk of flooding</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective NH 6 – Water Resources • Objective NH 7 – Wetlands, Springs, Rivers and Streams • Objective NH 8 – Riparian Zones • Objective DS 7 – Flood Risk Management and Assessment • Objective DS 8 – Climate Change & Adaptation • Objective LU 9 – Constrained Land Use Zone (CL) • Objective LU 11 – Flood Risk Areas and Land Use Zones • Policy FL 1 – Flood Risk Management • Objective FL 1 – Flood Risk Management and Assessment • Objective FL 2 – Flood Zones and Appropriate Land Uses • Objective FL 3 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • Objective FL 4 – Strategic Flood Risk Assessment and Flood Risk Assessment • Objective FL 5 – Environmental Impact Assessment (EIA) & Flood Risk Assessment • Objective FL 6 – Pluvial and Groundwater Flood Risk • Objective FL 7 – New and Emerging Data • Objective FL 8 – Protection of Water Bodies and Watercourses • Objective FL 9 – Arterial Drainage Scheme • Objective FL 10 – Improvement &/Or Restoration of Natural Flood Risk Management Functions • DM Guideline FL 1 – Flood Zones and Appropriate Land Uses • DM Guideline FL 2 – Structural and Non-Structural Risk Management Measures in Flood Vulnerable Zones • DM Guideline WQ 1 – Water Bodies and Watercourses <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies NHB 4, FL 1, FL 2, FL 3, FL 4 and FL 5 • Objectives NHB 3, NHB12, NHB 14, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, WW 7, FL 1, FL 2, FL 3, FL 4, FL 5, FL 6, DS 7, DS 8, DS 9 and RA 1 • DM Standard 27: Surface Water Drainage & Flooding
<p>Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</p> <p>Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Policy UI 1 – Water Supply, Wastewater and Combined Drainage Infrastructure • Policy UI 2 – Irish Water’s Water Services Strategic Plan • Objective UI 1 – Irish Water & Water and Wastewater Projects • Objective UI 2 – Water Supply & Water Conservation • Objective UI 3 – Wastewater Disposal • Objective UI 4 – Connections to the Public Sewer & Public Water Mains • Objective UI 5 – Surface Water Drainage and Sustainable Drainage Systems • Objective UI 6 – Wastewater Treatment Plant Buffer • Policy WM 1 – Waste Management • Policy WM 2 – Waste Management Plan

Likely Significant Effect, if unmitigated	Mitigation Measures, including:
<p>wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</p> <p>Increases in waste levels</p>	<ul style="list-style-type: none"> • Objective WM 1 – Waste Prevention, Reduction & Recycling • Objective WM 2 – Bring Bank Facility <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Policies WS 1 WS 2 WS 3 WS 4 WS 5 WS 6 WW 1 WM1 WM2 • Objectives WS 1, WS 2, WS 3, WS 4, WS 5, WS 6, WS 7, WS 8, WS 9, WS 10, WS 11, WS 12, WS 13, WS 14, WS 15, WW 1, WW 2, WW 3, WW 4, WW 5, WW 6, WW 7, WW 8, WW 10, WM 1, WM 2, WM 3, WM 4, WM 5, WM 6, CS 4, RHO 5 and EDT 5
<p>Emissions to air including greenhouse gas emissions and other emissions.</p> <p>Climate adaptation interactions</p>	<p>Measures from the Local Area Plan</p> <ul style="list-style-type: none"> • Objective DS 8 – Climate Change & Adaptation • Objective CF 9 – Amenity Network • Policy ST 1 – Sustainable Transport, Walking and Cycling • Objective ST 1 – Integrated Land Use and Transport • Objective ST 2 – Sustainable Transportation • Objective ST 3 – Walking • Objective ST 4 – Cycling • Objective ST 5 – Bicycle Parking • Objective ST 6 – Walking & Cycling Strategy • Objective ST 7 – Pedestrian Crossings • Objective ST 8 – Amenity Walking/Cycling Network • Objective ST 9 – Mobility Management Plans • Objective ST 10 – Charging Points for Electric Vehicles • Objective ST 11 – Bus Facilities & Services • Objective TI 7 – Noise • Objective TI 10 – Preparation of a Revised Traffic Management Plan • Objective TI 14 – New Developments & Connection to the Town Footpath & Lighting Network • Objective TI 15 – Footpath, Public Lighting, Cycle Provision & Traffic Calming • Policy ENV 1 – Climate Change Policy • Objective ENV 1 – Climate Change & The National Climate Change Adaptation Framework • Objective ENV 2 – Climate Change & Green Infrastructure • Objective ENV 3 – Air Quality • Objective ENV 4 – Air Purification • DM Guideline EC 1 – Energy Statements • Objective UD 4 – Green Network and Landscaping <p>Measures from the Galway County Development Plan (as varied)</p> <ul style="list-style-type: none"> • Strategic Aims 6, 7 and 11 • Policies CC 1, CC2, CC3, CC4, CC5, CC6, CC 7, TI 1, TI 2, TI 3 and TI 4 • Objectives DS 1, DS 2, DS 3, DS 8, CS 3, CS 5, TI 1, TI 2, TI 3, TI 4, TI 16, TI 17, TI 18, TI 19, TI 20, TI 21, DS 8, CC1, CC 2, CC3, CC 4 and CC5

6 Conclusion

Stage 1 AA Screening and Stage 2 AA of the Clifden LAP has been carried out. Implementation of the LAP has the potential to result in effects to the integrity of any European Sites, if unmitigated.

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

This assessment was undertaken with reference to all subsequent staged of the Plan making process, including all submissions made during the process.

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

Having incorporated mitigation measures, it is concluded that the Clifden LAP is not foreseen to give rise to any significant adverse effects on designated European Sites, alone or in combination with other plans or projects⁷. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated.

⁷ Except as provided for in Section 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.