

NATURA IMPACT REPORT

IN SUPPORT OF THE
APPROPRIATE ASSESSMENT
OF THE
VARIATION No. 2(B)
TO THE
GALWAY COUNTY DEVELOPMENT PLAN
2015-2021

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

for: Galway County Council

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1 Introduction

1.1 Background

CAAS has been appointed by Galway County Council to prepare this Natura Impact Report (NIR) in support of the Appropriate Assessment (AA) of the Variation No. 2(b) to the Galway County Development Plan 2015-2021 in accordance with the requirements of Article 6(3) of the EU Habitats Directive¹.

An AA is a requirement of Article 6 of the Council Directive 92/43/EEC of 21 May 1992 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 and Special Protection Areas 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 (S.I. 477) (often referred to as the Habitats Regulations) to ensure the ecological integrity of these sites. AA (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.

Galway County Development Plan 2015-2021 has already been subject to an AA and Strategic Environmental Assessment which were both accepted. The mitigation measures within the documents were deemed sufficient to ensure the implementation of the Plan would not result in any likely significant effects to European Sites. The Variation No. 2(b) will be considered alone and in-combination with Galway CDP, due to the existing CDP assessments.

Similarly, a Strategic Environmental Assessment (SEA) has been undertaken to assess the impacts of the Variation No. 2(b) on a number of environmental considerations including biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape and the interrelationship between these considerations, whenever applicable.

1.2 Legislative Context

The AA process 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 Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and provide for the protection and long-term survival of Europe's most valuable and threatened species and habitats.

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as "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 candidate Special Areas of Conservation (cSACs) designated under the

¹ Directive 92/43/EEC

Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC), 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 AA 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. 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", including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of European suite 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.

AA should be based on best scientific knowledge and Planning Authorities should ensure that scientific data (ecological and hydrological expertise) is utilised. This report details a Screening Statement to inform the AA process which is finalised by the statutory authority.

1.3 Guidance

This Screening Statement 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)*

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;
- 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 (SAC/ SPA).

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 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 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 Variation 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 development.

1.4.2 Zone of Influence

Following the source-pathway-receptor process a Zone of Influence (ZOI) will be determined based on the characteristics of the development (detailed in section 3.2) and the foreseen distribution of likely effects through any pathways identified. Once the ZOI is established, all European Sites within it will be 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 (AA) needs to be fully integrated with the various stages of the development plan process in order to ensure that the ecological implications of the variation do not affect any areas designated as European Sites. As the AA process, has been managed by part of the Forward Planning team, interaction has occurred from the early stages of writing of the variation to impress the importance of protection of European Sites and that the plan should be formulated to avoid adverse impacts on these sites. The final Variation encompassing all stages of the process was then assessed in a holistic sense to ensure all amendments were accounted for. In addition, the Strategic Environmental Assessment process has been taken into account in the AA process. The screening of objectives and the assessment of objectives in the context of mitigation measures and potential effects of the designated sites, has been an iterative process throughout each stage of the plan-making process.

2 Description and background of the Variation No. 2(b) to Galway CDP 2015-2021

2.1 Galway County Development Plan

The Galway County Development Plan 2015-2021 sets out an overall strategy for the proper planning and sustainable development of the functional area of Galway County Council. This Plan includes the administrative area of what was formerly Ballinasloe Town Council. The Plan presents Galway County Council's outlook for future development of the County 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.

Sustainable development can be described as a pattern of resource use that aims to meet human needs while respecting the environment so that these needs can be met not only in the present, but in the indefinite future. Sustainable development is founded on the "three independent and mutually reinforcing pillars" of economic development, social development and environmental protection. Information, integration and participation are key building blocks to help achieve development that recognises these independent pillars. Environmental and social concerns should be integrated into all development processes and broad public participation in decision-making is a fundamental prerequisite for achieving sustainable development.

This Plan builds on the strategies, policies and objectives of the Galway County Development, 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 Habitats Directive Assessment to the Plan.

2.1.1 Vision for County Galway

"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."

2.1.2 Previous Assessments

A detailed Natura Impact Report in support of the AA of Galway CDP 2015-2021 was compiled along with a detailed Strategic Impact Assessment and Strategic Flood Risk Assessment. These assessment processes were conducted through an iterative process to ensure their findings were incorporated into the policies and objective of the CDP itself. This process resulted in a robust set of mitigation and monitoring measures to ensure there were no likely significant adverse effects to any European Site arising from the implementation of the CDP.

2.1.3 Existing Policies and Objectives relating to the protection of European Sites

Given the uncertainties that exist with regard to the scale and location of developments facilitated by Galway CDP, it is recognised that the identification of effects is limited and effects to the integrity of European Sites will be further assessed through project-level AA. Table 2.1 detailed the Strategic Environmental Objectives incorporated into Galway CDP. These were implemented through policies and objectives; those which relate to the protection of ecological processes are listed in Table 2.2.

Table 2.1 Strategic Environmental Objectives in the Galway CDP 2015-2021

SEO Code	SEO
B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species
B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones - are of significant importance for wild fauna and flora and/or essential for the migration, dispersal and genetic exchange of wild species
B3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of species listed on Schedule 5 of the principal Act
B4	To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
PHH1	To protect populations and human health from exposure to incompatible landuses
S1	To avoid damage to the hydrogeological and ecological function of the soil resource in County Galway
W1	To maintain and improve, where possible, the quality and status of surface waters
W2	To prevent pollution and contamination of ground water
W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)
M1	To serve new development with adequate and appropriate waste water treatment
M2	To serve new development with adequate drinking water that is both wholesome and clean
M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse.
C1	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
CH1	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
CH2	To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context
L1	To avoid significant adverse impacts on the landscape - especially with regard to the County's landscapes which are most valuable and most sensitive to change and protected focal points and views

Table 2.2 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. 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:</p> <p style="padding-left: 40px;">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</p> <p style="padding-left: 40px;">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</p> <p style="padding-left: 40px;">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 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 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</p>

<p>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 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 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 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 the county.</p>
<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</p>

<p>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, stonewalls, 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 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</p>

<p>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 defences 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 Variation No. 2(b) to Galway CDP 2015-2021

The purpose of Variation 2(b) to the Galway County Development Plan 2015-2021 is to include the Gaeltacht LAP (including settlement zonings for An Cheathrú Rua, An Spidéal and Baile Chláir). This variation, in conjunction with the County Development Plan will inform and manage the future development of the Gaeltacht area. The Galway Gaeltacht covers extensive parts of County Galway. It stretches from Baile Chláir, to the east of the city to Cloch na Ron in west Connemara, a distance of c. 100km and from Oileán Árann northwards to Duiche Sheoigheach which borders County Mayo. The Gaeltacht area also spans townlands that are within Galway City boundary.

The Gaeltacht Local Area Plan was adopted in 2008, and was amended and extended in 2013. The current Gaeltacht LAP consists of the plan context, strategy, overview of the Districts and settlement plans for An Cheathrú Rua and An Spidéal. Baile Chláir is in the Gaeltacht, considering the previous plan Local Area Plan for Baile Chláir has now expired, it is prudent that Baile Chláir should be incorporated into the Gaeltacht plan. There are a number of other settlements in the Gaeltacht that have their own Local Area Plan, Maigh Cuillin has a plan in situ until 2019 and Bearna forms part of Variation No. 2(a) and will sit alongside the Gaeltacht Plan, Variation No. 2(b).

The aim of Variation No. 2(b) is to establish a framework for the planned, co-ordinated and sustainable development of the Gaeltacht area, and to enhance and facilitate the balancing of economic, social and environmental infrastructure in order to maintain and develop a high quality of life, without compromising the protection of the environment and the needs of future generations.

2.2.1 Strategic Vision of the Gaeltacht Plan Area

"The Gaeltacht area is a unique and a special place and it is important that it retains that distinctive cultural heritage and natural beauty which is of National significance through the principles of sustainable development, whilst meeting the needs and aspirations of both the residents' and visitors alike. Achieving the objectives of the Galway County Development Plan in order to sustain and develop the local economy and improve the quality of life for local residents.

2.3 Relationship with other Relevant Plans and Programmes

The Variation No. 2(b) relate to Galway CDP which sits within a hierarchy of strategic actions such as plans and programmes. The Variation No. 2(b) must comply with Galway CDP and relevant higher level strategic actions and may, in turn, guide lower level strategic actions.

The Variation No. 2(b) are subject to a number of high level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives in Section five of Galway County Development Plan 2015-2021. Examples of Environmental Protection Objectives include the aim 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 by 2015.

2.3.1 The National Spatial Strategy

The National Spatial Strategy (NSS) is the national planning framework for Ireland which promotes self-sustaining growth through building up sufficient scale and critical mass through a network of Gateways and Hubs. The Gateways act at national level and the Hubs act at the regional level. The County levels are partnered by the county towns and other larger towns which support the role of smaller towns, villages and rural areas as a focus for business, residential, service and amenity functions.

2.3.2 Regional Planning Guidelines

Ireland is divided into eight regional forward planning regions, Dublin, Midlands, Mid East, Mid-West, South East, South West, West and Border, each with its own regional planning authority composed of Elected Members selected by the constituent local government councils. Regional planning authorities are required, under the Planning and Development (Regional Planning Guidelines) Regulations 2003 (SI No. 175 of 2003), to draw up regional planning guidelines (RPGs), long term strategic planning frameworks, for their relevant region.

The RPGs for the West Region 2010-2022 provide a framework for the long term strategic development of the West Region through setting out goals, policies and objectives in relation to population targets, housing, infrastructure, economic development, environment, amenities, social infrastructure and community development, ensuring the successful implementation of the NSS at regional, county and local level.

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”. This variation is Variation No. 2(b), the Galway CDP had been subject to variations No. 1; details of these variations were also considered in the preparation of this AA. There is a Variation No. 2(a) also proposed; however, this variation has not been adopted and is still in preparation.

2.3.4 Environmental Protection Objectives

The Variation No. 2(b) is subject to a number of high level environmental protection policies and objectives with which it 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' and/ or 'Special Conservation Interests' of European Sites requiring assessment. Qualifying Interests (QI's) are the habitat features and species listed in Annex I & II of the EU Habitats Directive (92/43/EEC) for which each European Site has been designated and afforded protection. The 'Special Conservation Interests' (SCI's) are wetland habitats and bird species listed within Annex I & II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QI's and SCI's are considered as part of the assessment.

Site specific conservation objectives 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 draft 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 Variation 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 development study area.;
- Review of the NPWS site synopsis and conservation objectives for European Sites with identification of potential pathways from the development; and
- A series of ecological desk studies were undertaken between October 2017 and May 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 of the site. The DoEHLG (2009) Guidance on AA recommend a 15km buffer zone be considered around the site. It is foreseen that in the absence of significant hydrological links the characteristics of the Variation No. 2(b) (detailed in section 2) will not impose effects beyond this Zone of Influence.

European Sites that occur within 15km of the Variation No. 2(b) 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 Variation No. 2(b) to the CDP, 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.*
- *NATURA 2000 Standard Data Forms.*

Since the conservation objectives for the European Sites focus on maintaining the favorable conservation condition of the QI's/SCI's of each site, the screening process concentrated on assessing the potential effects of the Variation against the QI's/SCI's of each site. For each site the broader ecological resource requirements of each of the QI's/SCI's were considered in relation to the SSCO's and the site synopsis provided by the NPWS.

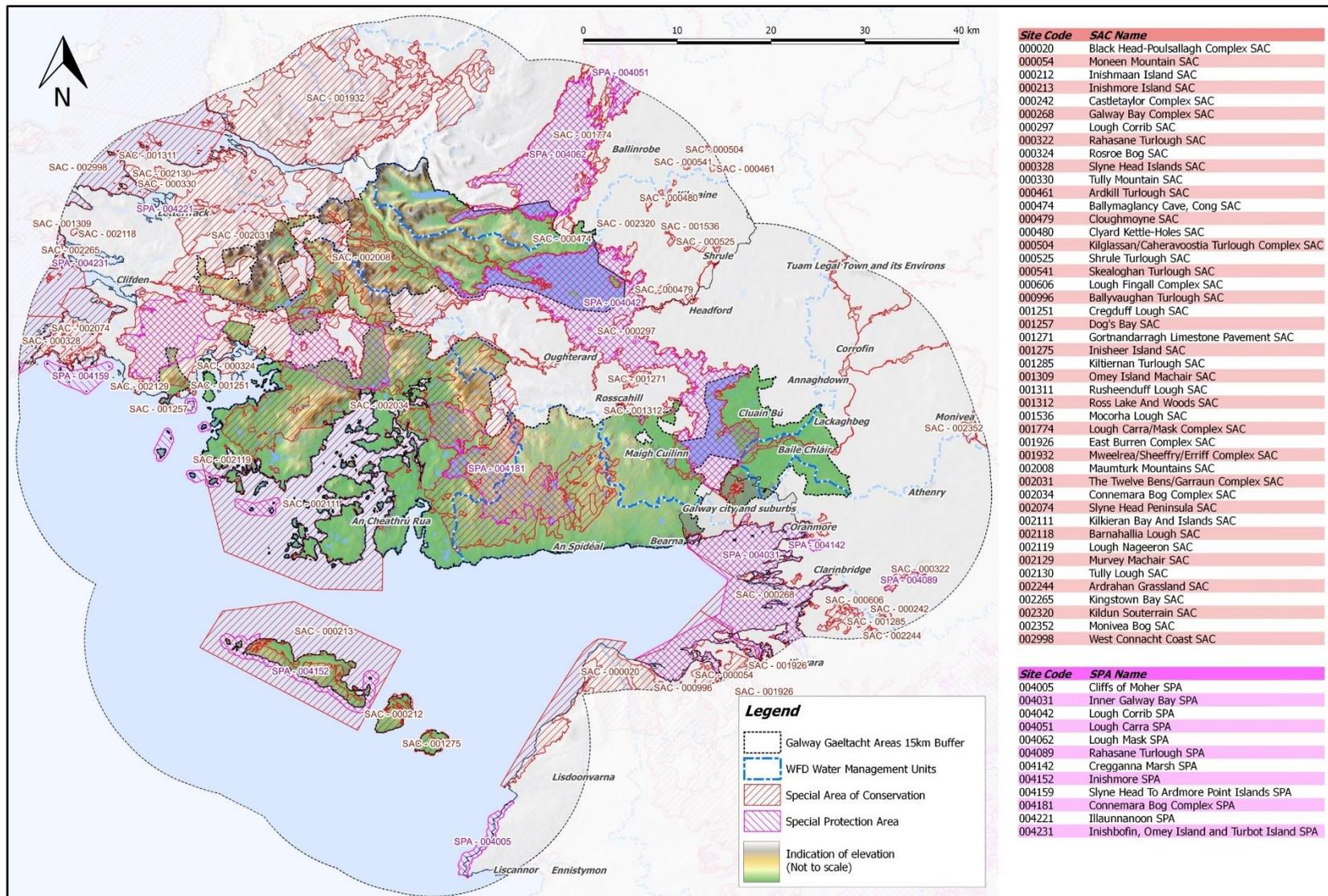


Figure 3.1 European sites within 15 km of the Variation No. 2(b) boundary

Table 3.1 European Sites within 15 km of the Variation No. 2(b) boundary in County Galway (Listed according to distance); qualifying features for each site can be found in Appendix I.

Site Code	Site Name	Distance (km)	Site Code	Site Name	Distance (km)
000212	Inishmaan Island SAC	0	002074	Slyne Head Peninsula SAC	5.73
000213	Inishmore Island SAC	0	000480	Clyard Kettle-Holes SAC	5.78
000268	Galway Bay Complex SAC	0	001536	Mocorha Lough SAC	5.95
000297	Lough Corrib SAC	0	000020	Black Head-Poulsallagh Complex SAC	6.9
000474	Ballymaglancy Cave, Cong SAC	0	000525	Shrule Turlough SAC	7.08
001251	Cregduff Lough SAC	0	000330	Tully Mountain SAC	8.16
001257	Dog's Bay SAC	0	002998	West Connacht Coast SAC	8.3
001275	Inisheer Island SAC	0	002130	Tully Lough SAC	8.58
001312	Ross Lake And Woods SAC	0	004005	Cliffs of Moher SPA	8.66
001774	Lough Carra/Mask Complex SAC	0	000322	Rahasane Turlough SAC	9.54
002008	Maumturk Mountains SAC	0	004089	Rahasane Turlough SPA	9.54
002031	The Twelve Bens/Garraun Complex SAC	0	004051	Lough Carra SPA	10.99
002034	Connemara Bog Complex SAC	0	000328	Slyne Head Islands SAC	11.18
002111	Kilkieran Bay And Islands SAC	0	000606	Lough Fingall Complex SAC	11.2
002119	Lough Nageeron SAC	0	000541	Skealaghan Turlough SAC	11.31
004031	Inner Galway Bay SPA	0	001311	Rusheenduff Lough SAC	11.38
004042	Lough Corrib SPA	0	000242	Castletaylor Complex SAC	11.87
004062	Lough Mask SPA	0	002265	Kingstown Bay SAC	11.91
004152	Inishmore SPA	0	001926	East Burren Complex SAC	12.23
004159	Slyne Head To Ardmore Point Islands SPA	0	000054	Moneen Mountain SAC	12.66
004181	Connemara Bog Complex SPA	0	002352	Monivea Bog SAC	12.74
000324	Rosroe Bog SAC	0.47	002118	Barnahallia Lough SAC	12.82
002129	Murvey Machair SAC	1.3	001285	Kiltiernan Turlough SAC	13.03
001271	Gortnandarragh Limestone Pavement SAC	1.64	000461	Ardkill Turlough SAC	13.71
001932	Mweelrea/Sheeffry/Erriff Complex SAC	2.09	002244	Ardrhan Grassland SAC	13.75
000479	Cloughmoyne SAC	2.96	004231	Inishbofin, Omev Island and Turbot Island SPA	13.78
002320	Kildun Souterrain SAC	3.27	000504	Kilglassan/Caheravoostia Turlough Complex SAC	14.15
004142	Cregganna Marsh SPA	4.62	001309	Omev Island Machair SAC	14.64
004221	Illaunnaon SPA	5.71	000996	Ballyvaughan Turlough SAC	14.79

*Indicates priority habitat

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 Variation No. 2(b) to the CDP is not the nature conservation management of the sites, but to establish a framework for the planned, co-ordinated and sustainable development of the Gaeltacht area. Therefore, the Variation No. 2(b) are 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 Variation No. 2(b) with Potential to Give Rise to Effects

The Variation provides fine scale detail and objectives around development and planning in the Gaeltacht area. These objectives relate to processes within the catchment and refine developmental approaches in relation to factors such as flood risk. There are also additional measures for the protection of ecological processes such as:

Objective GL8 Natural Heritage in the Gaeltacht

Promote the sustainable development of green infrastructure within settlements and seek its integration in development proposals as appropriate.

Objective GL9 Infrastructure in the Gaeltacht

(a) Promote the sustainable development of infrastructure projects and the improvement of the infrastructure network in the Galway Gaeltacht with close co-operation with the relevant stakeholders;

(b) Support the preparation and implementation of public realm plan and other related initiatives for villages in the Galway Gaeltacht as resources permit.

Objective CSB 4 – Open Spaces/Recreation & Amenity (OS) (Refer to Individual zoning maps for An Cheathrú Rua, An Spidéal and Baile Chláir)

Promote the sustainable management, use and/or development, as appropriate, of the OS lands in An Cheathrú Rua, An Spidéal and Baile Chláir settlement plans. This will include the:

a) Development of open spaces and recreational activities in accordance with best practice and on suitable lands with adequate access to the local community. Retain existing open space and recreational facilities, unless it can be clearly demonstrated to the satisfaction of Galway County Council that these uses are no longer required by the community;

b) Appropriate management and use of any flood risk areas within the OS Zone to avoid, reduce and/or mitigate, as appropriate, the risk and potential impact of flooding;

Appropriate management and use of any areas of high biodiversity including Natural Heritage Areas.

The Variation must comply with existing policies and objectives in the existing CDP which provides for development and has robust policies to ensure the protection of water quality and other ecological processes. There is potential for effects to species such as bats through light pollution imposed by development. Invasive species are a known threat to European Sites within the zone of influence, the development within the area may result in the spread of invasive species. These factors are considered below in relation to each European Site and their site-specific threats and conservation objectives.

3.3.3 Identification of Potential Likely Significant Effects

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 likely significant effects resulting from the Variation No. 2(b). 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 Variation and the potential effect they may cause to the site were considered. The elements of the Variation No. 2(b) with potential to cause effect to 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 Variation No. 2(b) to the CDP, and the site to be screened;
- where the site is located at such a distance from Variation No. 2(b) to the CDP that effects are not foreseen;
- where it is that known threats or vulnerabilities at a site cannot be linked to potential impacts that may arise from the Variation No. 2(b) to the CDP.

Table 3.2 Screening of European Sites within 15 km of the Variation No. 2(b) boundary

Site Code	European Site	Distance (km)	Potential effects	Pathway for Significant Effects	Potential for In-Combination Effects
000212	Inishmaan Island SAC ²	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
000213	Inishmore Island SAC ³	0	Development within the SAC boundary or with direct links to the site boundary may cause effects. Increased visitor numbers at this site need to be managed appropriately.	Yes	Yes
000268	Galway Bay Complex SAC ⁴	0	Sewage capacity issues due to increased pressure from development.	Yes	Yes
000297	Lough Corrib SAC ⁵	0	Sewage capacity issues due to increased pressure from development.	Yes	Yes
000474	Ballymaglancy Cave, Cong SAC ⁶	0	Increased visitor pressure.	Yes	Yes
001251	Cregduff Lough SAC ⁷	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
001257	Dog's Bay SAC ⁸	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
001275	Inisheer Island SAC ⁹	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
001312	Ross Lake And Woods SAC ¹⁰	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
001774	Lough Carra/Mask Complex SAC ¹¹	0	The spread of invasive species such as <i>Acer pseudoplatanus</i> , <i>Prunus laurocerceous</i> and <i>Fallopia japonica</i> . Japanese knotweed is particularly invasive and difficult to control. Policies are required to ensure the further spread of these species are controlled.	Yes	Yes
002008	Maumturk Mountains SAC ¹²	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes

² NPWS (2014) Conservation Objectives: Inishmaan Island SAC 000212. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

³ NPWS (2015) Conservation Objectives: Inishmore Island SAC 000213. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

⁴ NPWS (2013) Conservation Objectives: Galway Bay Complex SAC 000268. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

⁵ NPWS (2017) Conservation Objectives: Lough Corrib SAC 000297. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

⁶ NPWS (2018) Conservation objectives for Ballymaglancy Cave, Cong SAC [000474]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁷ NPWS (2018) Conservation objectives for Cregduff Lough SAC [001251]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁸ 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.

⁹ NPWS (2014) Conservation Objectives: Inisheer Island SAC 001275. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

¹⁰ NPWS (2018) Conservation objectives for Ross Lake and Woods SAC [001312]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

¹¹ NPWS (2018) Conservation objectives for Lough Carra/Mask Complex SAC [001774]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

¹² NPWS (2017) Conservation Objectives: Maumturk Mountains SAC 002008. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

002031	The Twelve Bens/Garraun Complex SAC ¹³	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
002034	Connemara Bog Complex SAC ¹⁴	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
002111	Kilkieran Bay And Islands SAC ¹⁵	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
002119	Lough Nageeron SAC ¹⁶	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
004031	Inner Galway Bay SPA ¹⁷	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
004042	Lough Corrib SPA ¹⁸	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
004062	Lough Mask SPA ¹⁹	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
004152	Inishmore SPA ²⁰	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
004159	Slyne Head To Ardmore Point Islands SPA ²¹	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
004181	Connemara Bog Complex SPA ²²	0	Development within the SAC boundary or with direct links to the site boundary may cause effects.	Yes	Yes
000324	Rosroe Bog SAC ²³	0.47	The existing development framework has included policies and objectives that facilitate the protection the ecological characteristics of this site (see Table 2.1 and Table 2.2). The Threats to the site include turf cutting and increased grazing impacts. The Variation will not contribute to these pressures. The SAC is outside of the river catchments within the Variation Boundary. Therefore, there is no hydrological pathways for effects.	No	No

¹³ 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.

¹⁴ NPWS (2015) Conservation Objectives: Connemara Bog Complex SAC 002034. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

¹⁵ NPWS (2014) Conservation Objectives: Kilkieran Bay and Islands SAC 002111. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

¹⁶ NPWS (2018) Conservation objectives for Lough Nageeron SAC [002119]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

¹⁷ NPWS (2013) Conservation Objectives: Inner Galway Bay SPA 004031. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

¹⁸ NPWS (2018) Conservation objectives for Lough Corrib SPA [004042]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

¹⁹ NPWS (2018) Conservation objectives for Lough Mask SPA [004062]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

²⁰ NPWS (2018) Conservation objectives for Inishmore SPA [004152]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

²¹ NPWS (2018) Conservation objectives for Slyne Head to Ardmore Point Islands SPA [004159]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

²² NPWS (2018) Conservation objectives for Connemara Bog Complex SPA [004181]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

²³ NPWS (2017) Conservation Objectives: Rosroe Bog SAC 000324. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

002129	Murvey Machair SAC ²⁴	1.3	Machair habitat and Petalwort species are sensitive to localised impacts, mainly through agricultural practices ²⁵ . There are no provisions within the Variation that interact with agricultural practices or land uses of the site. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation.	No	No
001271	Gortnandarragh Limestone Pavement SAC ²⁶	1.64	Limestone pavements (for which this site is designated) are sensitive to localised impacts that arise from land use and habitat management activities ²⁵ ; therefore, the distance from the Variation means there are no pathways for effects.	No	No
001932	Mweelrea/Sheeffry/Erriff Complex SAC ²⁷	2.09	Overgrazing and water quality are identified as the biggest threats to the site. The existing development framework has robust provisions to ensure the maintenance of water quality; such as the following: 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. 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. 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. Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS)	No	No

²⁴ NPWS (2017) Conservation Objectives: Murvey Machair SAC 002129. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

²⁵ 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.

²⁶ NPWS (2018) Conservation objectives for Gortnandarragh Limestone Pavement SAC [001271]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht

²⁷ NPWS (2017) Conservation Objectives: Mweelrea/Sheeffry/Erriff Complex SAC 001932. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

		<p>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 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 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 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</p>		
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			<p>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>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 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>There are no additional sources for effects introduced by the Variation to this SAC.</p>		
000479	Cloughmoyne SAC ²⁸	2.96	Limestone pavements (for which this site is designated) are sensitive to localised impacts that arise from land use and habitat management activities ²⁵ ; therefore, the distance from the Variation means there are no pathways for effects. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation.	No	No
002320	Kildun Souterrain SAC ²⁹	3.27	The SAC is designated for the Lesser Horseshoe bat which has a known home rang of up to 4.2km ³⁰ . The Variation provides for development within the potential home range of the species. Lighting is a known barrier for the free movement of this species. Therefore, mitigation is required to ensure natural lighting conditions are maintain where possible, and directional lighting is used to minimise any potential effects. Mitigation is required.	Yes	Yes

²⁸ NPWS (2018) Conservation objectives for Cloughmoyne SAC [000479]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

²⁹ NPWS (2018) Conservation objectives for Kildun Souterrain SAC [002320]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

³⁰ Bontadina, F., Schofield, H. and Naef-Daenzer, B., 2002. Radio-tracking reveals that lesser horseshoe bats (*Rhinolophus hipposideros*) forage in woodland. *Journal of Zoology*, 258(3), pp.281-290.

004142	Cregganna Marsh SPA ³¹	4.62	Hydrological connectivity to the site which is dependent on water quality characteristics and development could potentially affect this.	Yes	Yes
004221	Illaunnaon SPA ³²	5.71	Hydrological connectivity to the site which is dependent on water quality characteristics and development could potentially affect this.	Yes	Yes
002074	Slyne Head Peninsula SAC ³³	5.73	The site is sensitive to localised impacts as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
000480	Clyard Kettle-Holes SAC ³⁴	5.78	The site is sensitive to localised impacts from agricultural practices and direct land use activities, as identified by the NPWS in their site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The Variation boundary is downstream of the SAC and therefore, there is no hydrological pathways for effects.	No	No
001536	Mocorha Lough SAC ³⁵	5.95	There are no known threats to the site as identified by the NPWS, although there is evidence of historic infilling. Calcareous fens are sensitive to peat extractions, agriculture and infilling ²⁵ ; which are all localised effects. There are no provisions within the Variation that interact with local land use processes. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the	No	No

³¹ NPWS (2018) Conservation objectives for Cregganna Marsh SPA [004142]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

³² NPWS (2018) Conservation objectives for Illaunnaon SPA [004221]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

³³ NPWS (2015) Conservation Objectives: Slyne Head Peninsula SAC 002074. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

³⁴ NPWS (2018) Conservation objectives for Clyard Kettle-holes SAC [000480]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht

³⁵ NPWS (2018) Conservation objectives for Mocorha Lough SAC [001536]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

			implementation of the Variation. The Variation boundary is downstream of the SAC and therefore, there is no hydrological pathways for effects.		
000020	Black Head-Poulsallagh Complex SAC ³⁶	6.9	The site is sensitive to localised impacts as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
000525	Shrulle Turlough SAC ³⁷	7.08	Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity ²⁵ . Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
000330	Tully Mountain SAC ³⁸	8.16	The site is sensitive to localised impacts such as burning as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
002998	West Connacht Coast SAC ³⁹	8.3	There are no site-specific threats identified by the NPWS and the known threats to the Bottlenose Dolphin species are entanglement with fishing gear,	No	No

³⁶ NPWS (2014) Conservation Objectives: Black Head-Poulsallagh Complex SAC 000020. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

³⁷ NPWS (2018) Conservation objectives for Shrulle Turlough SAC [000525]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

³⁸ NPWS (2018) Conservation objectives for Tully Mountain SAC [000330]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

³⁹ NPWS (2015) Conservation Objectives: West Connacht Coast SAC 002998. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

			<p>prey competition, pollution, habitat degradation and disturbance²⁵. Variation No. 2 (b) is a land use plan, that relates to activities on land. There are no pathways for effects to the ecological integrity of the SAC except through hydrological links; however, the existing policies with which the Variation must comply ensure the protection of water quality through policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection</p> <p>Detailed Above.</p>		
002130	Tully Lough SAC ⁴⁰	8.58	<p>The site is sensitive to localised impacts such as the spread of invasive species as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.</p>	No	No
004005	Cliffs of Moher SPA ⁴¹	8.66	<p>The SSCO's identify that the 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. Also, 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. There are no hydrological pathways for effects from the variation to the SPA. The Variation is a significant distance from the SPA and does not introduce any identifiable</p>	No	No

⁴⁰ NPWS (2018) Conservation objectives for Tully Lough SAC [002130]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁴¹ NPWS (2018) Conservation objectives for Cliffs of Moher SPA [004005]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

			sources for effects to the ecological integrity of the site, taking into account the vulnerabilities of the site.		
000322	Rahasane Turlough SAC ⁴²	9.54	Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity ²⁵ . Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
004089	Rahasane Turlough SPA ⁴³	9.54	The SSCO's identify that the 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. Also, 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. There are no hydrological pathways for effects from the variation to the SPA. The Variation is a significant distance from the SPA and does not introduce any identifiable sources for effects to the ecological integrity of the site, taking into account the vulnerabilities of the site.	No	No
004051	Lough Carra SPA ⁴⁴	10.99	Eutrophication of this hard water and naturally mesotrophic system is a serious threat. However, there are no hydrological pathways for effects to this site. The site is sensitive to localised impacts such as vegetation clearance as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation.	No	No

⁴² NPWS (2018) Conservation objectives for Rahasane Turlough SAC [000322]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁴³ NPWS (2018) Conservation objectives for Rahasane Turlough SPA [004089]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁴⁴ NPWS (2018) Conservation objectives for Lough Carra SPA [004051]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

000328	Slyne Head Islands SAC ⁴⁵	11.18	<p>There are no site-specific threats to the habitats or species of the islands identified by the NPWS. The main threats to Grey Seals are entanglement with fishing gear, prey competition, pollution, habitat degradation and disturbance. For reef habitats the main threats are recruitment changes due to fishing activities²⁵. Variation No. 2 (b) is a land use plan, that relates to activities on land. There are no pathways for effects to the ecological integrity of the SAC except through hydrological links; however, the existing policies with which the Variation must comply ensure the protection of water quality through policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection</p> <p>Detailed Above.</p>	No	No
000606	Lough Fingall Complex SAC ⁴⁶	11.2	<p>Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity²⁵. The lesser horseshoe bat has a known home range of 4.2km within which it is sensitive to disturbance. Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.</p>	No	No

⁴⁵ NPWS (2012) Conservation Objectives: Slyne Head Islands SAC 000328. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

⁴⁶ NPWS (2018) Conservation objectives for Lough Fingall Complex SAC [000606]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

000541	Skealaghan Turlough SAC ⁴⁷	11.31	Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity ²⁵ . Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
001311	Rusheenduff Lough SAC ⁴⁸	11.38	The site is sensitive to localised impacts such as eutrophication from local farming as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
000242	Castletaylor Complex SAC ⁴⁹	11.87	There are presently few real threats to the turlough. The site is sensitive to localised impacts such as the destruction of vegetation local farming as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
002265	Kingstown Bay SAC ⁵⁰	11.91	The site is sensitive to localised impacts such as the spread of invasive species as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of	No	No

⁴⁷ NPWS (2018) Conservation objectives for Skealaghan Turlough SAC [000541]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁴⁸ NPWS (2018) Conservation objectives for Rusheenduff Lough SAC [001311]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁴⁹ NPWS (2018) Conservation objectives for Castletaylor Complex SAC [000242]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht

⁵⁰ NPWS (2011) Conservation Objectives: Kingstown Bay SAC 002265. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

			landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.		
001926	East Burren Complex SAC ⁵¹	12.23	The site is sensitive to localised impacts such as nutrient enrichment as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Also, the lesser horseshoe bat has a known home range of 4.2km. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
000054	Moneen Mountain SAC ⁵²	12.66	The site is sensitive to localised impacts such as nutrient enrichment as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Also, the lesser horseshoe bat has a known home range of 4.2km. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
002352	Monivea Bog SAC ⁵³	12.74	The site is sensitive to localised impacts such as nutrient enrichment as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted	No	No

⁵¹ NPWS (2018) Conservation objectives for East Burren Complex SAC [001926]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht

⁵² NPWS (2018) Conservation objectives for Moneen Mountain SAC [000054]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁵³ NPWS (2015) Conservation Objectives: Monivea Bog SAC 002352. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

			with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.		
002118	Barnahallia Lough SAC ⁵⁴	12.82	The site is sensitive to localised impacts such as agricultural processes as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCOs. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCOs) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
001285	Kiltiernan Turlough SAC ⁵⁵	13.03	Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity ²⁵ . Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCOs) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
000461	Ardkill Turlough SAC ⁵⁶	13.71	Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity ²⁵ . Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCOs) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No

⁵⁴ NPWS (2018) Conservation objectives for Barnahallia Lough SAC [002118]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht

⁵⁵ NPWS (2018) Conservation objectives for Kiltiernan Turlough SAC [001285]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht

⁵⁶ NPWS (2018) Conservation objectives for Ardkill Turlough SAC [000461]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

002244	Ardrahan Grassland SAC ⁵⁷	13.75	The site is sensitive to localised impacts such as grazing as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
004231	Inishbofin, Omev Island and Turbot Island SPA ⁵⁸	13.78	The SSCO's identify that the 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. Also, 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. There are no hydrological pathways for effects from the variation to the SPA. The Variation is a significant distance from the SPA and does not introduce any identifiable sources for effects to the ecological integrity of the site, taking into account the vulnerabilities of the site.	No	No
000504	Kilglassan/Cahevavostia a Turlough Complex SAC ⁵⁹	14.15	Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity ²⁵ . Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No
001309	Omev Island Machair SAC ⁶⁰	14.64	The site is sensitive to localised impacts such as changes in agricultural practices as identified by the NPWS (details can be found in Appendix I) in the site synopsis and SSCO's. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that	No	No

⁵⁷ NPWS (2018) Conservation objectives for Ardrahan Grassland SAC [002244]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁵⁸ NPWS (2018) Conservation objectives for Inishbofin, Omev Island and Turbot Island SPA [004231]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁵⁹ NPWS (2018) Conservation objectives for Kilglassan/Cahevavostia Turlough Complex SAC [000504]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

⁶⁰ 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.

			will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.		
000996	Ballyvaughan Turlough SAC ⁶¹	14.79	Hydrology is the key driver for turlough ecology with flood duration and groundwater contribution being important factors. Other considerations are grazing processes and intensity ²⁵ . Appendix I details the site-specific threats and vulnerabilities for the site. These effects are localised. Therefore, the distance from the Variation area is of landscape scale, and there are no sources for effects from the variation that will influence the ecological integrity of the site, taking into account the site vulnerabilities and threats. Similarly, the distance between the Variation boundary and the SAC means that the structure and function of the habitat features/characteristics (as per the SSCO's) of the site will not be interacted with as a result of the implementation of the Variation. The variation area has no hydrological pathways for effects to the SAC.	No	No

⁶¹ NPWS (2018) Conservation objectives for Ballyvaughan Turlough SAC [000996]. Generic Version 6.0. Department of Culture, Heritage and the Gaeltacht.

3.4 Other Plans and Programs

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or programmes that might, in combinations with the plan or project, have the potential to adversely impact upon European Sites. Table 3.3 outlines plans or projects that may interact with the Variation No. 2(b) to cause in-combination effects to European Sites. The plans or projects are listed according to a spatial hierarchy of National, Regional/Local Projects and Plans, as follows:

- National Spatial Strategy 2002-2020
- Grid 25
- Energy Policy framework 2007-2020, Governments White Paper
- Irish Water's Water Services Strategic Plan 2015 and associated Capital Investment Plan 2014-2016
- Regional Planning Guidelines for the West Region 2010 - 2022
- 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
- Co. Galway Wind Energy Strategy
- Variation No. 2(a) to the Galway County Development Plan

Given the uncertainties that exist with regard to the scale and location of developments facilitated by the Variation No. 2(b), 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.

As the Variation have to comply with the policies and objectives of Galway CDP as well as higher-level plans (detailed above) the potential for effects to European Sites are thought to be very low. Therefore, in-combination effects to the integrity of European Sites are not seen to be likely.

Table 3.3 Plans or projects within the Zone of Influence of the Variation No. 2(b) 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
National Spatial Strategy 2002-2020	Published	Objectives of the NSS are to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning. Objectives in relation to the CDP are discussed above.	This plan 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 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.
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	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

				Alteration of hydrology Deterioration in water quality Disturbance during construction / operation	project which arise from the implementation of these plans will not be significant.
Irish Water's Water Services Strategic Plan 2015 and associated Capital Investment Plan 2014-2016	Published	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.	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 water and waste water infrastructure and capacity. Meeting additional potable water demands and waste water treatment demands arising from the 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 groundwaters. 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 groundwaters 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	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.
Regional					
Regional Planning Guidelines for the West Region 2010 - 2022	Published	The RPGs for the West Region 2010-2022 provide a framework for the long term strategic development of the West Region through setting out goals, policies and objectives in relation to population targets, housing, infrastructure, economic development,	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 infrastructure or where new development occurs. Provision of infrastructure/development may result in: Habitat loss	No, The mitigation measures contained within both plans prioritise the avoidance of effects where possible and provide measures to minimise effects. In

		environment, amenities, social infrastructure and community development, ensuring the successful implementation of the NSS at regional, county and local level.		Alteration of hydrology Deterioration in water quality Disturbance during construction / operation	combination effects from project which arise from the implementation of these plans will not be significant.
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)	Published	Outlines policies for how sustainable travel and transport systems can be achieved to create a connected city region driven by smarter mobility.	These plans was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.	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: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation	No, The mitigation measures contained within these plans and the variation 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.
Local					
Mayo County Development Plan 2014-2020 Roscommon County Development Plan 2016-2022 Offaly County Development Plan 2014-2020	Published	Overall strategies for the proper planning and sustainable development of the administrative area of the relevant Local Authorities.	These plan was subject to SEA and AA which incorporated robust mitigation measures into the plan itself to minimise effects.	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: Habitat loss Alteration of hydrology Deterioration in water quality	No, The mitigation measures contained within these plans and the variation 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>North Tipperary County Development Plan 2010 – 2016(as extended) Clare County Development Plan 2017-2023 Galway City Council Development Plan 2017-2023</p>				<p>Disturbance during construction / operation</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: 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>Variation No. 2(a) to the Galway County Development Plan</p>	<p>Proposed</p>	<p>Overall strategies for the proper planning and sustainable development of the administrative area of the relevant Local Authorities.</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: Habitat loss Alteration of hydrology Deterioration in water quality Disturbance during construction / operation</p>	<p>This Variation is proposed and is still being prepared. The in-combination effects will be considered in the preparation of Variation No. 2 (a) when the final details of the variation are known.</p>

3.5 Conclusions

The likely effects that could arise from the Variation No. 2(b) to the Galway County Development Plan 2015-2021 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 Variation:

- 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 AA

4.1 Introduction

The main objective of this stage (Stage 2) in the AA is to determine whether the Variation No. 2(b) 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 Screening presented above has identified six European Sites with potential to be affected by the Variation No. 2(b) (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 Variation 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 Impacted upon by the Variation No. 2(b).

Coastal & Marine	Lakes, Rivers & Aquatics Vegetation	Caves, woodland, & Bats	Bog Habitats	SPA
Galway Bay Complex SAC	Lough Corrib SAC	Ballymaglancy Cave, Cong SAC	Maumturk Mountains SAC	Inner Galway Bay SPA
Kilkieran Bay And Islands SAC	Lough Carra/Mask Complex SAC	Ross Lake And Woods SAC	The Twelve Bens/Garraun Complex SAC	Slyne Head To Ardmore Point Islands SPA
Inishmaan Island SAC	Lough Nageeron SAC	Kildun Souterrain SAC	Connemara Bog Complex SAC	Connemara Bog Complex SPA
Dog's Bay SAC	Cregduff Lough SAC			Cregganna Marsh SPA
Inisheer Island SAC				Lough Mask SPA
Inishmore Island SAC				Inishmore SPA
				Lough Corrib SPA
				Illaunnanoon SPA

4.2 Characterization of European Sites Potentially Affected

The Variation No. 2(b) area has a European Site within its boundaries as well as being directly adjacent to another European Site. The AA Screening identified seven European Sites with pathway receptors for potential impacts. Therefore, it is necessary to characterize each of these sites and the sensitivities of their qualifying interests, special conservation interests or their conservation objectives.

Table 4.2 characterizes each of the qualifying interests of the seven European Sites brought forward from stage 1 (Table 4-1). These are described in context of each of the sites vulnerabilities in **Appendix I**. Each of these site characterizations were derived from the NPWS website⁶².

⁶² NPWS (2016), last accessed 20th March 2017; <https://www.npws.ie/protected-sites>

Table 4.2 Characterisation of the qualifying interests/special conservation interests of each of the European Sites potentially impacted upon by the Variation No. 2(b)

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)
000212	Inishmaan Island SAC	0	Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Machairs (* in Ireland) [21A0] European dry heaths [4030] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) [6510] Limestone pavements [8240]
000213	Inishmore Island SAC	0	Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) [2170] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] European dry heaths [4030] Alpine and Boreal heaths [4060] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) [6510] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] Vertigo <i>angustior</i> (Narrow-mouthed Whorl Snail) [1014]
000268	Galway Bay Complex SAC	0	Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160]

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)
			<p>Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Turloughs [3180] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] Alkaline fens [7230] Limestone pavements [8240] <i>Lutra lutra</i> (Otter) [1355] <i>Phoca vitulina</i> (Harbour Seal) [1365]</p>
000297	Lough Corrib SAC	0	<p>Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140] Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the <i>Rhynchosporion</i> [7150] Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] Alkaline fens [7230] Limestone pavements [8240] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] Bog woodland [91D0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092]</p>

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)
			Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Drepanocladus vernicosus (Slender Green Feather-moss) [1393] Najas flexilis (Slender Naiad) [1833]
000474	Ballymaglancy Cave, Cong SAC	0	Caves not open to the public 8310 Rhinolophus hipposideros 1303
001251	Cregduff Lough SAC	0	Petalophyllum ralfsii 1395 Najas flexilis 1833
001257	Dog's Bay SAC	0	Annual vegetation of drift lines 1210 Embryonic shifting dunes 2110 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2120 Fixed coastal dunes with herbaceous vegetation (grey dunes) 2130 European dry heaths 4030
001275	Inisheer Island SAC	0	Coastal lagoons 1150 Reefs 1170 European dry heaths 4030 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 6210 Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) 6510 Limestone pavements 8240
001312	Ross Lake And Woods SAC	0	Rhinolophus hipposideros 1303 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. 3140
001774	Lough Carra/Mask Complex SAC	0	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) 91E0 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3110 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea 3130 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. 3140 European dry heaths 4030 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 6210 Calcareous fens with Cladium mariscus and species of the Caricion davallianae 7210

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)
			Alkaline fens 7230 Limestone pavements 8240 Rhinolophus hipposideros 1303 Lutra lutra 1355 Drepanocladus vernicosus 1393
002008	Maumturk Mountains SAC	0	Salmo salar 1106 Najas flexilis 1833 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3110 Northern Atlantic wet heaths with Erica tetralix 4010 Alpine and Boreal heaths 4060 Blanket bogs (* if active bog) 7130 Depressions on peat substrates of the Rhynchosporion 7150 Siliceous rocky slopes with chasmophytic vegetation 8220
002031	The Twelve Bens/Garraun Complex SAC	0	Margaritifera margaritifera 1029 Salmo salar 1106 Lutra lutra 1355 Najas flexilis 1833 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3110 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea 3130 Alpine and Boreal heaths 4060 Blanket bogs (* if active bog) 7130 Depressions on peat substrates of the Rhynchosporion 7150 Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8110 Calcareous rocky slopes with chasmophytic vegetation 8210 Siliceous rocky slopes with chasmophytic vegetation 8220 Old sessile oak woods with Ilex and Blechnum in the British Isles 91A0
002034	Connemara Bog Complex SAC	0	Coastal lagoons 1150 Reefs 1170 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3110 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea 3130 Natural dystrophic lakes and ponds 3160 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation 3260

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)
			Northern Atlantic wet heaths with <i>Erica tetralix</i> 4010 European dry heaths 4030 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) 6410 Blanket bogs (* if active bog) 7130 Transition mires and quaking bogs 7140 Depressions on peat substrates of the <i>Rhynchosporion</i> 7150 Alkaline fens 7230 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles 91A0 <i>Euphydryas aurinia</i> 1065 <i>Salmo salar</i> 1106 <i>Lutra lutra</i> 1355 <i>Najas flexilis</i> 1833
002111	Kilkieran Bay And Islands SAC	0	<i>Lutra lutra</i> 1355 <i>Phoca vitulina</i> 1365 <i>Najas flexilis</i> 1833 Mudflats and sandflats not covered by seawater at low tide 1140 Coastal lagoons 1150 Large shallow inlets and bays 1160 Reefs 1170 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) 1330 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 1410 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> 3130 Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>) 6510 Machairs (* in Ireland) 21A0
002119	Lough Nageeron SAC	0	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] <i>Najas flexilis</i> [1833]
004031	Inner Galway Bay SPA	0	Great Northern Diver (<i>Gavia immer</i>) [A003] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Grey Heron (<i>Ardea cinerea</i>) [A028] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Shoveler (<i>Anas clypeata</i>) [A056]

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)
			Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Lapwing (<i>Vanellus vanellus</i>) [A142] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Turnstone (<i>Arenaria interpres</i>) [A169] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] Common Tern (<i>Sterna hirundo</i>) [A193] Wetland and Waterbirds [A999]
004042	Lough Corrib SPA	0	Gadwall (<i>Anas strepera</i>) [A051] Shoveler (<i>Anas clypeata</i>) [A056] Pochard (<i>Aythya ferina</i>) [A059] Tufted Duck (<i>Aythya fuligula</i>) [A061] Common Scoter (<i>Melanitta nigra</i>) [A065] Hen Harrier (<i>Circus cyaneus</i>) [A082] Coot (<i>Fulica atra</i>) [A125] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999]
004062	Lough Mask SPA	0	Tufted Duck (<i>Aythya fuligula</i>) [A061] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Common Tern (<i>Sterna hirundo</i>) [A193] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999]

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)
004152	Inishmore SPA	0	Kittiwake (<i>Rissa tridactyla</i>) [A188] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Little Tern (<i>Sterna albifrons</i>) [A195] Guillemot (<i>Uria aalge</i>) [A199]
004159	Slyne Head To Ardmore Point Islands SPA	0	Barnacle Goose (<i>Branta leucopsis</i>) [A045] Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Little Tern (<i>Sterna albifrons</i>) [A195]
004181	Connemara Bog Complex SPA	0	Cormorant (<i>Phalacrocorax carbo</i>) [A017] Merlin (<i>Falco columbarius</i>) [A098] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Common Gull (<i>Larus canus</i>) [A182]
002320	Kildun Souterrain SAC	3.27	Rhinolophus hipposideros [1303]
004142	Cregganna Marsh SPA	4.62	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]
004221	Illaunnanoon SPA	5.71	Sandwich Tern (<i>Sterna sandvicensis</i>) [A191]

4.3 Identifying and Characterising Potential Significant Effects

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

Direct and Indirect Impacts - An impact can be caused either as a direct or as an indirect consequence of a 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;
- 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;
- Extremely Unlikely: <5% chance as occurring as predicted.

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (CIEEM 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. The integrity of a site is 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 (CIEEM, 2016).

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

Site-specific conservation objectives (SSCOs) have been prepared for a number of European Sites. These detailed SSCO's 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 cSACs 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 Variation 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 Variation 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 are 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 sites individually can be found below in **Table 4.3**.

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

4.3.1.1 Reduction of Habitat Area

No specific development within the boundaries of any European Site has been identified by the variation. Given the uncertainties that exist with regard to the scale and location of developments facilitated by the Variation No. 2(b), it is recognised that all projects which arise as a result of the Variation will be subject to their own SEA and AA processes to ensure the protection of European Sites in accordance with the Strategic Environmental Objective B1 from the existing CDP.

4.3.1.2 Fragmentation

Habitat fragmentation could occur for species such as the lesser horseshow bat due to light pollution of foot of development within the Variation area. Mitigation to reduce potential effects are required to ensure connectivity of ecological resources for the species. The existing policies and objectives within the CDP are robust to maintain the physical connectivity of habitats and facilitate the movement of species across the landscape. Therefore, only lighting is identified as a potential barrier for the movement of species.

4.3.1.3 Disturbance to Key Species

Disturbance to species supported by a European Site is likely to occur where there is an increase in activity levels from recreation and amenity or from developments within or adjacent to designated areas. Sources of disturbance include noise, vibration, light, construction and operation activities or other sources of disturbance arising from recreation and amenity or from the inappropriate timing of works. The greatest pressure in relation to disturbance effects are surrounding noise impacts. Disturbance effects due to noise are accounted for by Objective TI 12: Require all new 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. The spread of invasive species due to development in the vicinity of European sites imposes a possible threat, therefore mitigation measures are required in relation to Invasive species management to ensure there will be no further spread of invasive species within protected sites.

4.3.1.4 Changes of Indicators of Conservation Value

Key indicators of conservation value for relevant European Sites listed in Table 4.3 include sediment characteristics and water quality. Effects to these sites may occur due to the hydrological connection between the sites and the Variation Area. Implementation of the Variation could result in alterations to the hydrological regime or physical environment of the sites due to vibrations, alteration of flow regime, and discharges of pollutants to watercourses. However, water quality effects are adequately accounted for by the existing CDP which includes provisions for SUDS and groundwater interactions (Objective WW 7 and WS 1).

Table 4.3 Characterisation of Potentially Impacted from the Variation to the Qualifying Interests/Special Conservation Interests of the European Sites brought forward from Stage 1

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
000212	Inishmaan Island SAC	0	<p>Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Machairs (* in Ireland) [21A0] European dry heaths [4030] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) [6510] Limestone pavements [8240]</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>The SAC is sensitive to Land development and disturbance from tourism. The SSCO's for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics. The ecological processes detailed within the NPWS documents are heavily reliant on local land use management on the island.</p> <p>No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives for Inishmaan.</p> <p>Disturbance from tourism is minimised low on foot of the Variation however, objective GL2 and GL8 provide additional protection to minimise any potential adverse effects.</p> <p>Objective GL2 Tourism Developments in the Gaeltacht <i>(a) It is an objective of the Council to encourage and facilitate the development of the tourism potential of the Gaeltacht areas in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage and local amenities of the area;</i></p>	No; however, potential minor effects due to tourism may occur.	Yes

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p><i>(b) Provide where feasible, and support the provision of tourism infrastructure and services including, walking, cycling and water based infrastructure and short-term guest accommodation facilities throughout the Gaeltacht area in appropriate locations. Such infrastructure and services shall seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that any new projects, such as greenways, are a suitable location from ecological sensitivities, such as riparian zones.'</i></p> <p>Objective GL8 Natural Heritage in the Gaeltacht</p> <p><i>'Promote the sustainable development of green infrastructure within settlements of the Gaeltacht and seek its integration in development proposals as appropriate in order to protect light sensitive species such as bats, lighting fixtures should provide only the amount of light necessary for personal safety and should be designed so as to avoid creating glare or emitting light above a horizontal plane'</i></p>		
000213	Inishmore Island SAC	0	<p>Coastal lagoons [1150] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Dunes with <i>Salix repens</i> ssp. <i>argentea</i> (<i>Salicion arenariae</i>) [2170] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] European dry heaths [4030]</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>The SAC is sensitive to housing and boating development, agricultural activities and water quality effects. The SSCO's for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			<p>Alpine and Boreal heaths [4060] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Limestone pavements [8240] Submerged or partially submerged sea caves [8330] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]</p>	<p>community dynamics. The ecological processes detailed within the NPWS documents are heavily reliant on local land use management on the island. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives for Inishmore. Potential effects to water quality are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
000268	Galway Bay Complex SAC	0	<p>Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310]</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			<p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Turloughs [3180] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] Alkaline fens [7230] Limestone pavements [8240] Lutra lutra (Otter) [1355] Phoca vitulina (Harbour Seal) [1365]</p>	<p>minimize and avoid potential effects to European sites. The SAC is sensitive to sewage effluent, detritus of the aquaculture industry and effects to sedimentation (See appendix I for further details). The SSCOs for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics. The ecological processes detailed within the NPWS documents are heavily reliant on land use management in the proximity of Galway City. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives for in or adjacent to the Galway Bay SAC. Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as: Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
000297	Lough Corrib SAC	0	<p>Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]</p> <p>Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea [3130]</p> <p>Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]</p> <p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]</p> <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]</p> <p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]</p> <p>Active raised bogs [7110]</p> <p>Degraded raised bogs still capable of natural regeneration [7120]</p> <p>Depressions on peat substrates of the Rhynchosporion [7150]</p> <p>Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210]</p> <p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p> <p>Alkaline fens [7230]</p> <p>Limestone pavements [8240]</p> <p>Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]</p> <p>Bog woodland [91D0]</p> <p>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>The main threats to the quality of this site are from water polluting (See appendix I for further details). The SSCO's for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics which are heavily reliant on hydrological condition and characteristics.</p> <p>Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355] Drepanocladus vernicosus (Slender Green Feather-moss) [1393] Najas flexilis (Slender Naiad) [1833]	Objective NHB12 - Soil/Ground Water Protection Detailed Above.		
000474	Ballymaglancy Cave, Cong SAC	0	Caves not open to the public 8310 <i>Rhinolophus hipposideros</i> 1303	Lighting is identified as a potential barrier for the movement of the lesser horseshoe bat (<i>Rhinolophus hipposideros</i>). The Variation will have no interaction with the integrity of Caves not open to the public.	Yes	Yes, mitigation to reduce light pollution
001251	Cregduff Lough SAC	0	Petalophyllum ralfsii 1395 Najas flexilis 1833	The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the policies and objectives contained within the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of these mitigation measures. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites. The SAC is sensitive to development for tourism. The SSCO's for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near Cregduff Lough.	No; however, potential minor effects due to tourism may occur.	Yes

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				Disturbance from tourism is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects.		
001257	Dog's Bay SAC	0	Annual vegetation of drift lines 1210 Embryonic shifting dunes 2110 Shifting dunes along the shoreline with Ammophila arenaria (white dunes) 2120 Fixed coastal dunes with herbaceous vegetation (grey dunes) 2130 European dry heaths 4030	The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the policies and objectives contained within the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of these mitigation measures. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites. The main threats to the site are erosion due to wave action, overgrazing (mainly by cattle) and recreational pressures. Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects.	No; however, potential minor effects due to tourism may occur.	Yes
001275	Inisheer Island SAC	0	Coastal lagoons 1150 Reefs 1170 European dry heaths 4030 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 6210 Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) 6510 Limestone pavements 8240	The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the policies and objectives contained within the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of these mitigation measures. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites. The main threats to the site are erosion due to wave action, overgrazing (mainly by cattle) and recreational pressures. The Variation does not	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				introduce any additional sources for effects to impose on the SSCO's of the SAC. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives on Inisheer Island.		
001312	Ross Lake And Woods SAC	0	Rhinolophus hipposideros 1303 Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. 3140	Lighting is identified as a potential barrier for the movement of the lesser horseshoe bat (<i>Rhinolophus hipposideros</i>). The Hard oligo-mesotrophic waters with benthic vegetation habitat is sensitive to water quality interactions. Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as: Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.	Yes	Yes, mitigation to reduce light pollution Objective GL8
001774	Lough Carra/Mask Complex SAC	0	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) 91E0 Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) 3110	Lighting is identified as a potential barrier for the movement of the lesser horseshoe bat (<i>Rhinolophus hipposideros</i>). This site is sensitive to invasive the spread of invasive species however Objective CC 5 within the existing	No	Yes, mitigation to reduce light pollution Objective GL8

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			<p>Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea 3130</p> <p>Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. 3140</p> <p>European dry heaths 4030</p> <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 6210</p> <p>Calcareous fens with Cladium mariscus and species of the Caricion davallianae 7210</p> <p>Alkaline fens 7230</p> <p>Limestone pavements 8240</p> <p>Rhinolophus hipposideros 1303</p> <p>Lutra lutra 1355</p> <p>Drepanocladus vernicosus 1393</p>	<p>Galway CDP provides robust protection in relation to the control of invasive species. The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the policies and objectives contained within the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of these mitigation measures. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection</p> <p>Detailed Above.</p>		

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
002008	Maumturk Mountains SAC	0	<p>Salmo salar 1106</p> <p>Najas flexilis 1833</p> <p>Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3110</p> <p>Northern Atlantic wet heaths with Erica tetralix 4010</p> <p>Alpine and Boreal heaths 4060</p> <p>Blanket bogs (* if active bog) 7130</p> <p>Depressions on peat substrates of the Rhynchosporion 7150</p> <p>Siliceous rocky slopes with chasmophytic vegetation 8220</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>The main threats to the quality of this site are from water polluting (See appendix I for further details). The SSCO's for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics which are heavily reliant on hydrological condition and characteristics.</p> <p>Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				Objective NHB12 - Soil/Ground Water Protection Detailed Above.		
002031	The Twelve Bens/Garraun Complex SAC	0	<p>Margaritifera margaritifera 1029</p> <p>Salmo salar 1106</p> <p>Lutra lutra 1355</p> <p>Najas flexilis 1833</p> <p>Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3110</p> <p>Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoetoneanojuncetea 3130</p> <p>Alpine and Boreal heaths 4060</p> <p>Blanket bogs (* if active bog) 7130</p> <p>Depressions on peat substrates of the Rhynchosporion 7150</p> <p>Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) 8110</p> <p>Calcareous rocky slopes with chasmophytic vegetation 8210</p> <p>Siliceous rocky slopes with chasmophytic vegetation 8220</p> <p>Old sessile oak woods with Ilex and Blechnum in the British Isles 91A0</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>The main threats to the quality of this site are from water polluting (See appendix I for further details). The SSCOs for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics which are heavily reliant on hydrological condition and characteristics.</p> <p>Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs)</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4- Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
002034	Connemara Bog Complex SAC	0	<p>Coastal lagoons 1150 Reefs 1170 Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) 3110 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoetoneanojuncetea 3130 Natural dystrophic lakes and ponds 3160 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation 3260 Northern Atlantic wet heaths with Erica tetralix 4010 European dry heaths 4030 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) 6410 Blanket bogs (* if active bog) 7130 Transition mires and quaking bogs 7140 Depressions on peat substrates of the Rhynchosporion 7150 Alkaline fens 7230 Old sessile oak woods with Ilex and Blechnum in the British Isles 91A0</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>The main threats to the quality of this site are from water polluting (See appendix I for further details). The SSCOs for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics which are heavily reliant on hydrological condition and characteristics.</p> <p>Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			Euphydryas aurinia 1065 Salmo salar 1106 Lutra lutra 1355 Najas flexilis 1833	Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.		
002111	Kilkieran Bay And Islands SAC	0	Lutra lutra 1355 Phoca vitulina 1365 Najas flexilis 1833 Mudflats and sandflats not covered by seawater at low tide 1140 Coastal lagoons 1150 Large shallow inlets and bays 1160 Reefs 1170 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1330 Mediterranean salt meadows (Juncetalia maritimi) 1410 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea 3130 Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) 6510 Machairs (* in Ireland) 21A0	The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites. The main threats to the quality of this site are from water polluting (See appendix I for further details). The SSCOs for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics which are heavily reliant on hydrological condition and characteristics. Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as: Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
002119	Lough Nageeron SAC	0	<p>Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoetoneanojuncetea</i> 3130 <i>Najas flexilis</i> 1833</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>The main threats to the quality of this site are from water polluting (See appendix I for further details). The SSCOs for the site detail targets and attributes relating to the distribution of species and the structure/function of habitat features and community dynamics which are heavily reliant on hydrological condition and characteristics.</p> <p>Potential effects to water quality or waste water issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.		
004031	Inner Galway Bay SPA	0	Great Northern Diver (<i>Gavia immer</i>) [A003] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Grey Heron (<i>Ardea cinerea</i>) [A028] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Shoveler (<i>Anas clypeata</i>) [A056] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Lapwing (<i>Vanellus vanellus</i>) [A142] Dunlin (<i>Calidris alpina</i>) [A149] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites. Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA.	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			<p>Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Turnstone (<i>Arenaria interpres</i>) [A169] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] Common Tern (<i>Sterna hirundo</i>) [A193] Wetland and Waterbirds [A999]</p>	<p>Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects. Potential effects to water quality issues are accounted for in the existing CDP through policies and objectives such as: Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
004042	Lough Corrib SPA	0	<p>Gadwall (<i>Anas strepera</i>) [A051] Shoveler (<i>Anas clypeata</i>) [A056] Pochard (<i>Aythya ferina</i>) [A059] Tufted Duck (<i>Aythya fuligula</i>) [A061] Common Scoter (<i>Melanitta nigra</i>) [A065] Hen Harrier (<i>Circus cyaneus</i>) [A082] Coot (<i>Fulica atra</i>) [A125] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			<p>Common Gull (<i>Larus canus</i>) [A182] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999]</p>	<p>Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA. Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects. Potential effects to water quality issues are accounted for in the existing CDP through policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
004062	Lough Mask SPA	0	<p>Tufted Duck (<i>Aythya fuligula</i>) [A061] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182]</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
			Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Common Tern (<i>Sterna hirundo</i>) [A193] Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999]	affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites. Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA. Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects. Potential effects to water quality issues are accounted for in the existing CDP though policies and objectives such as: Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources		

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
004152	Inishmore SPA	0	Kittiwake (<i>Rissa tridactyla</i>) [A188] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Little Tern (<i>Sterna albifrons</i>) [A195] Guillemot (<i>Uria aalge</i>) [A199]	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA.</p> <p>Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects.</p> <p>Potential effects to water quality issues are accounted for in the existing CDP through policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS)</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
004159	Slyne Head To Ardmore Point Islands SPA	0	<p>Barnacle Goose (<i>Branta leucopsis</i>) [A045] Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Little Tern (<i>Sterna albifrons</i>) [A195]</p>	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA.</p> <p>Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects.</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>Potential effects to water quality issues are accounted for in the existing CDP through policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDS) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
004181	Connemara Bog Complex SPA	0	Cormorant (<i>Phalacrocorax carbo</i>) [A017] Merlin (<i>Falco columbarius</i>) [A098] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Common Gull (<i>Larus canus</i>) [A182]	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA.</p> <p>Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects.</p> <p>Potential effects to water quality issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection</p> <p>Detailed Above.</p>		
002320	Kildun Souterrain SAC	3.27	Rhinolophus hipposideros 1303	Lighting is identified as a potential barrier for the movement of the lesser horseshoe bat (<i>Rhinolophus hipposideros</i>).	No	Yes, mitigation to reduce light pollution Objective GL8
004142	Cregganna Marsh SPA	4.62	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	The existing CDP accounts for potential development within the Variation boundary. This CDP was subject	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA.</p> <p>Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects.</p> <p>Potential effects to water quality issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs)</p>		

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		
004221	Illaunnaon SPA	5.71	Sandwich Tern (<i>Sterna sandvicensis</i>) [A191]	<p>The existing CDP accounts for potential development within the Variation boundary. This CDP was subject to its own NIS process which determined that the implementation of the CDP would not significantly affect the ecological integrity of any European Site. This variation to the existing CDP must comply with all of policies and objectives contained within it. The Variation provides additional detail on the development framework and vision for the Gaeltacht region in Galway as well as protection measures to minimize and avoid potential effects to European sites.</p> <p>Water quality interactions and direct disturbances are the main threats/vulnerabilities identified to the SPA. Disturbance effects that may arise from the variation are primarily through potential development within the zoned lands, and disturbance through recreation. No direct land take or development will arise due to the implementation of the Variation as there are no zoning objectives in near the SPA.</p> <p>Disturbance from tourist recreation is minimised low on foot of the Variation however, objective GL2 and GL8 (detailed above) provide additional protection to minimise any potential adverse effects.</p> <p>Potential effects to water quality issues are accounted for in the existing CDP though policies and objectives such as:</p> <p>Objective WS 1 – Protection of Ground Waters Objective WW 1 - EU Policies and Directives Objective WW 6 – Adherence to Environmental Standards</p>	No	No

Site Code	Site Name	Distance (km)	Qualifying features (Qualifying Interests or Special Conservation Interests)	Characterization of Potential Effects	Potential Significant Effects	Mitigation Required
				<p>Objective WW 7 – Surface Water Drainage & Sustainable Drainage Systems (SuDS) Objective WW 8 – Substandard Wastewater Treatment Plants Objective CC 5 - An Ecosystems Approach and Land Use Objective FL 2 – Surface Water Drainage and Sustainable Drainage Systems (SuDs) Objective FL 3 - Protection of Waterbodies and Watercourses Policy NHB 4– Water Resources Objective NHB 3 – Water Resources Objective NHB12 - Soil/Ground Water Protection Detailed Above.</p>		

5 Mitigation Measures

5.1 Introduction

This section outlines measures that have been incorporated into the Variation in order to mitigate against potential effects to European Sites as identified above.

The Variation No. 2(b) was prepared in an iterative manner whereby Galway Council prepared the first draft of the variation which was provided to CAAS who made suggestions for integration into the Plan. Galway County Council then reviewed the variation to take account of the SEA/AA suggestions and sent the following revision back to CAAS for comment. A similar process was conducted with the NPWS and EPA, who's consideration and concerns were incorporated into the Variation. Variation No. 2(b), as detailed above, is a feature of the higher-level Galway CDP and therefore all measures, development principals, policies, aims and objectives contained within it must be adhered to by the Variation.

In order to demonstrate that there will be no adverse effects from the Variation, mitigation measures have been devised and incorporated into the text of the Plan, described below. The measures that have been incorporated with those by the SEA Environmental Report and with other relevant plans and programmes such as the programme of measures by the Transport Strategy for Galway and the River Basin Management Plans along with their associated SEAs.

Based on the types of impacts identified above, the mitigation measures presented below are split into two main categories, 'Measures to Protect Habitats and Species' and 'Measures to Protect Water Quality'. As mentioned previously, the Variation is a lower tier Plan of the Galway CDP, therefore environmental protection measures included in the Galway CDP must also be adhered to during developments of the Variation.

5.2 Measures incorporated into the text of Variation No. 2(b)

5.2.1 Mitigation

As outlined in Section 4.3 of this assessment a number of significant effects that could impact on habitats and species have been identified. No zoning or specific projects are by the Variation that would result in direct effects on any European Site.

Measures have been included in the policies and objectives of the Variation that will ensure these impacts are avoided. Variation No. 2(b) sits within a hierarchy of development plans in County Dublin, it is a lower tier plan under the Galway County Development Plan 2015 – 2021, therefore mitigation measures included in the Galway CDP also apply to development and land use in the Variation area.

Section 3.3.2 of this assessment identified that lighting conditions within the Variation area could affect the qualifying interests of some European Sites designated for the lesser horseshoe bat as well as a few other low-level sources of effects.

As a result of the AA and Strategic Environmental Assessment of the Variation, 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 AAs 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 Variation will also comply with measures listed in Section 9 (Table 9.1) of then 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 detailed in Table 9.2 of the SEA Environmental Report relevant to the protection of European Sites

Environmental Component	Potential Significant Effect, if unmitigated	Mitigation Measure
Biodiversity and Flora and Fauna	Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species & Loss of biodiversity with regard to designated sites including Wildlife Sites and species listed on Schedule 5 of the Wildlife Act 1976	Measures from the Variation <ul style="list-style-type: none"> • Objective GL2 Tourism Developments in the Gaeltacht <i>'(a) It is an objective of the Council to encourage and facilitate the development of the tourism potential of the Gaeltacht areas in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage and local amenities of the area;</i> <i>(b) Provide where feasible, and support the provision of tourism infrastructure and services including, walking, cycling and water based infrastructure and short-term guest accommodation facilities throughout the Gaeltacht area in appropriate locations. Such infrastructure and services shall seek to manage any increase in visitor numbers in order to avoid significant effects including loss of habitat and disturbance, including ensuring that any new projects, such as greenways, are a suitable location from ecological sensitivities, such as riparian zones.'</i> • Objective GL8 Natural Heritage in the Gaeltacht <i>'Promote the sustainable development of green infrastructure within settlements of the Gaeltacht and seek its integration in development proposals as appropriate in order to protect light sensitive species such as bats, lighting fixtures should provide only the amount of light necessary for personal safety and should be designed so as to avoid creating glare or emitting light above a horizontal plane'</i> Measures from the Plan as varied <ul style="list-style-type: none"> • Policies NHB 1, NHB 5, NHB 6, NHB 7 and NHB 8 • Objectives DS 6, DS 9, EQ1, EQ 4, ICT 1, NHB 1, NHB 4, NHB 5, NHB 6, NHB 7, NHB 13, AFF 6 and DS10
	Loss of biodiversity with regard to ecological connectivity and stepping stones	Measures from the Variation <ul style="list-style-type: none"> • Objective DO 10 An Spidéal Demesne Measures from the Plan as varied <ul style="list-style-type: none"> • Policies NHB 2 and NHB 3 • Objectives NHB 2, NHB 8, NHB 10 and NHB 11
	Damage to the hydrogeological and ecological function of the soil resource	Measures from the Plan as varied <ul style="list-style-type: none"> • Objective NHB12 • Also see measures related to water quality and waste water treatment
	Adverse impacts upon the status and quality of water bodies, including bathing waters	Measures from the Plan as varied <ul style="list-style-type: none"> • Policies NHB 4 and AFF 5 • Objectives NHB 3, NHB 8, NHB 10, NHB12, EQ1, AFF 5, AFF 6, AFF9, CS 4, WS 1, WS 2, WS 7, WS 9, WS 11, WW 1, FL 2, FL 3 and RA 1

5.2.2 Monitoring Programme

As part of the SEA and AA process a Monitoring Programme has been developed with the aim of monitoring the environmental effects of Variation No. 2(b). The full details of the environmental monitoring programme are presented in Section 10 of the SEA Environmental Report. Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

Monitoring is based around indicators which allow quantitative measures of trends. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions. Table 5.2 below shows the indicators and targets relevant to any European Sites which have been selected for monitoring the likely significant effects of the implementation of the Variation. The source of data and frequency is also indicated. In addition to existing monitoring datasets, the output of lower-tier environmental assessment and decision making, including a review of project approvals granted and associated documents, will also be utilised as part of the Monitoring Programme. Where significant effects, including positive, negative, cumulative and indirect, have the potential to occur as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

Monitoring is an ongoing process and the programme allows for flexibility and the further refinement of indicators and targets. The Monitoring Programme may also be updated to deal with specific environmental issues, including unforeseen effects, as they arise. A stand-alone Monitoring Report on the significant environmental effects of the Variation will be prepared in advance of the review of the Plan.

Table 5.2 Extracted from the SEA report section 10; Table 10.4 Selected Indicators, Targets and Monitoring Sources

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under national and international legislation to be unaffected by implementation of the Plan (as varied) ⁶³	<ul style="list-style-type: none"> Internal monitoring of environmental likely significant effects of grants of permission (grant by grant). Department of Culture, Heritage and the Gaeltacht report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). National Monitoring Report under Article 12 of the Birds Directive. Consultations with the NPWS (at monitoring evaluation)
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan (as varied)	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for in the Plan (as varied)	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). CORINE mapping resurvey (every c. 5 years).
	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan (as varied) B3ii: Number of significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976.	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan (as varied) B3ii: No significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation).
	B4: Population of the county involved in land management	B4: Sustain the population of the county involved in land management	<ul style="list-style-type: none"> CSO Population Data (every c. 5 years).
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

⁶³ 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.

Water	W1i: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)	W1i: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve <i>good status</i> ⁶⁴	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland. EPA Quality of Bathing Water in Ireland reports.
	W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	W1ii: To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	
	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual).
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i>	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
M3i: Total collected and brought household waste	M3i: Minimise increases in and, where possible, reduce household waste generation	<ul style="list-style-type: none"> EPA National Waste Reports EPA Ireland's Environment Reports 	
M3ii: Packaging recovered (t) by self-complying packagers	M3ii: Maximise increases in packaging recovered (t) by self-complying packagers		

⁶⁴ Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

- *Q4* in the biological classification of *rivers*;
- *Mesotrophic* in the classification of *lakes*; and
- *Unpolluted status* in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

6 Conclusion

Stage 1 Screening and Stage 2 AA of the Variation No. 2(b) to the Galway County Development Plan 2015-2021 has been carried out. Implementation of the Variation 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 variation will themselves be subject to AA when further details of design and location are known.

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

Having incorporated mitigation measures, it is concluded that the Variation to the Galway County Development Plan 2015-2021 is not foreseen to give rise to any significant adverse effects on designated European sites, alone or in combination with other plans or projects⁶⁵. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated.

⁶⁵ 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.