Variation No.1

Comhairle Contae an Chláir
Clare County Council

Clare County Development Plan 2017–2023

Variation No. 1

11th March 2019

To give effect to the Government Policy Statement on the Development of Data Centres in Ireland by identifying in a plan led manner the preferred location of a Data Centre in County Clare.

Natura Impact Report

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INTRODUCTION

Doherty Environmental Consultants (DEC) Ltd has been appointed by Clare County Council to undertake a Natura Impact Report (NIR) of a proposed variation (Variation No. 1) to the Clare County Development Plan (CDP). This NIR has been completed with respect to the requirements outlined in Article 6(3) of the EU Habitats Directive and Section 177U of the Planning and Development Act and has been prepared in order to facilitate Clare County Council's requirement for completing an Appropriate Assessment of the proposed variation.

The proposed Variation No. 1 to the Clare CDP is not directly connected with or necessary for the management of any European Site and hence the requirements of Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Act 2000, apply. Section 177U(1) of the Planning and Development Act 2000 requires that a screening for appropriate assessment of, *inter alia*, a land use plan be carried out by a competent authority to assess, in light of best scientific knowledge, whether the proposed Plan, individually or in combination with another plan or project is likely to have a significant effect on a European site. A Statement in support of Screening for Appropriate Assessment has been completed and assessed the potential for the proposed Variation to result in likely significant effects to European Sites.

The Screening concluded that the proposed Variation has the potential to result in likely significant effects to 25 European Sites. These European Sites are:

Table 0.1.1 Identification of European Sites

Danes Hole, Poulnalecka SAC (000030)
Ballyallia Lough SPA (004041)
Black Head Poulsallagh Complex SAC (000020)
Dromore Woods and Loughs SAC (000032)
Inagh River Estuary SAC (000036)
Lough Gash Turlough SAC (00000051)
Moneen Mountain SAC [000054]
Galway Bay Complex SAC (000268)
Ballyvaughan Turlough SAC (000996)
East Burren Complex SAC (001926)
Newhall and Edenvale Complex SAC (002091)
Newgrove House SAC (002157)
Lower River Shannon SAC (002165)

Old Farm Buildings, Ballymacrogan SAC (002245)
Old Domestic Building, Keevagh SAC (002010)
Kilkee Reefs SAC (002264)
Ratty River Cave SAC (002316)
Kilkishen House SAC (002319)
Pouladatig Cave SAC (000037)
Cliffs of Moher SPA (004005)
Inner Galway Bay SPA (004031)
Lough Derg (Shannon) SPA (004058)
River Shannon and River Fergus Estuaries SPA (004077)
Mid-Clare Coast SPA (004182)
Corofin Wetlands SPA (004220)

Appendix 1 provides further details of these European Sites by listing each of the qualifying features of interest for these European Sites; the current conservation status of these features of interest; the conservation objectives for these features; and the conditions underpinning the integrity of these features.

This NIR has been prepared to inform the Appropriate Assessment of the proposed Variation's potential to result in likely significant effects to these European Sites and their qualifying features of interest occurring within the zone of influence of the proposed Variation.

The remainder of this NIR is structured as follows:

Section 2: Assessment Method

Section 3: Overview of the proposed Variation

Section 4: Summary of the Screening for Appropriate Assessment

Section 5: Assessment of the Proposed Variation

Section 6: Mitigation

Section 7: Conclusions

ASSESSMENT METHODOLOGY

GUIDANCE

This NIR has been undertaken in accordance with National and European guidance documents: Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DEHLG 2010) and *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats directive 92/43/EEC.* The following guidance documents were also of relevance during this the preparation of this NIR:

- A guide for competent authorities. Environment and Heritage Service, Sept 2002. Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2010). DEHLG.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/42/EED. European Commission (2001).
- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats directive 92/43/EEC. European commission (2000). (To be referred to as MN 2000).
- Communication from the Commission on the precautionary principle. European Commission (2000).

BACKGROUND TO HABITATS DIRECTIVE ARTICLE 6 ASSESSMENTS

The EC (2001) guidelines outline the stages involved in undertaking an assessment of a plan under Article 6(3) and 6(4) of the Habitats Directive. The assessment process comprises the four stages outlined below. Stage 1 to 3 form part of the Article 6(3) process, while Stage 4 forms part of the Article 6(4) process. This NIR presents the findings of an assessment for Stage 2 of this assessment process.

- Stage 1 – Screening: This stage defines the proposed plan, establishes whether the proposed plan is necessary for the conservation management of the Natura 2000 site and assesses the likelihood of the plan to have a significant effect, alone or in combination with other plans or projects, upon a Natura 2000 site.

- Stage 2 – Appropriate Assessment: If a plan or project is likely to have a significant affect an Appropriate Assessment must be undertaken. In this stage the impact of the plan or project to the Conservation Objectives of the Natura 2000 site is assessed. The outcome of this assessment will establish whether the plan will have an adverse effect upon the integrity of the Natura 2000 site.

- Stage 3 – Assessment of Alternative Solutions: If it is concluded that, subsequent to the implementation of mitigation measures, a plan has an adverse impact upon the integrity of a Natura 2000 site it must be objectively concluded that no alternative solutions exist before the plan can proceed.

- Stage 4 – Where no alternative solutions exist and where adverse impacts remain but imperative reasons of overriding public interest (IROPI) exist for the implementation of a plan or project an assessment of compensatory measures that will effectively offset the damage to the European Site(s) will be necessary.

STAGE 2: APPROPRIATE ASSESSMENT STEPS

The EC Guidance Assessment Criteria for Appropriate Assessment seeks the following information:

1. A description of the elements of the project that are likely to give rise to significant effects to European Sites;
2. The Setting out the Conservation Objectives of the Site;
3. A description of how the plan will affect key species and key habitats;
4. A description of how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the plan (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes etc.);
5. A description of the mitigation measures that are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of European Sites.

INFLUENCE OF THE APPROPRIATE ASSESSMENT PROCESS ON THE PROPOSED VARIATION

The purpose of the Appropriate Assessment of the proposed Variation is not only to assess the implications of this Plan on European Sites and their qualifying features of interest occurring within its zone of influence, but also to provide safeguards that aim to minimise the ecological implications of the Plan and avoid likely significant effects to European Sites. This latter element of the Appropriate Assessment process is manifest in the following scenarios:

- Where specific elements of the proposed Variation have been identified as having the potential to result in negative land use effects that could in turn result in impacts to European Sites, the relevant text of the proposed Variation will be revised to minimise such effects.

- Where elements of the proposed Variation are of a more general nature that prevented the identification of likely impacts to European Sites, text was provided to ensure that all potential impacts arising out of these elements of the Variation are assessed as part of an Appropriate Assessment at the project level.

- Any elements of the proposed Variation and the Clare CDP that aim to protect the natural environment were identified and evaluated for their role in safeguarding European Sites.

OVERVIEW OF THE PROPOSED VARIATION

This proposed Variation has been prepared in response to a number of factors:

Project Ireland 2040 - *National Planning Framework* which sets out the strategic importance of data centres in Irelands' Enterprise Strategy the Government Statement on '*The Role of Data Centres in Ireland'* which recommends a plan-led approach to providing for data centres.

In June 2017 the Industrial Development Authority (IDA) wrote to local authorities requesting their strategic input to an IDA research project regarding land/site identification in respect of land/facilities suitable for data centre type development

In November 2017, Clare County Council (CCC) published an Expression of Interest looking for sites for potential data centres. The tender sought expressions of interest from individuals, companies and partners who either own or can identify sites that could support the development of data centres in the county.

Following this process, the lands at Toureen were identified as the preferred site. As the existing land is partly zoned as Industrial and the remainder as open countryside the need to consider a Variation to the Clare CDP has been identified and has now commenced.

Clare County Council has initiated the procedures for making a Variation to the Clare CDP 2017-2023 under Section 13 of the Planning and Development Act 2000 (as amended).

The proposed variation provides for the following changes to:

(1) Volume 1 - Written Statement of the Clare County Development Plan 2017-2023:

- To incorporate the use and development of data centres and power generating infrastructure into the enterprise zoning definition, the following additional text is proposed to be added into the zoning objective for enterprise as set out in Chapter 19, *"data centres,"* and "*power generating infrastructure as well "*

(2) Volume 3(a) Ennis Municipal District – Written Statement and Settlement Plans of the Clare County Development Plan 2017-2023:

- Amend the zoning objective for the lands currently identified in the Ennis Settlement Plan as Industrial IND1 to Enterprise ENT3 at Toureen and extend the Enterprise ENT3 zoning objective to 45ha, onto lands currently identified as being in the open countryside;

- Zone an area of approximately 10 hectares as Buffer Space at Toureen;

- Replace text in Section 1.5.2 associated with lands currently identified in the Ennis Settlement Plan as Industrial Zoning (IND1) with text associated with the extended site identified as Enterprise (ENT3) to read as follows:

Project Ireland 2040 - National Planning Framework sets out the strategic importance of data centres in Irelands' Enterprise Strategy. Having regard to the Government Statement on 'The Role of Data Centres in Ireland', which in particular recommends having a plan-led approach to data centres, this 55ha site has been identified and zoned as Enterprise (45ha) and for Buffer Space (10ha) with a specific use for a Data Centre Campus due to its proximity to the electricity sub-station, its proximity to the M18 motorway and adjoining regional road network, the location of the site relative to the Gas Pipeline, the availability of Dark Fibre and the proximity of the site to Shannon International Airport and Ennis Town.

This site is zoned to accommodate a Data Centre campus which consists of one or more structures, used primarily for the storage, management and dissemination of data and the provision of associated power electricity connections and energy generating infrastructure.

- Replace text currently in Section 2.13.5 relating to lands at Toureen with new additional text

Project Ireland 2040 - *National Planning Framework* sets out the strategic importance of data centres in Irelands' Enterprise Strategy. Having regard to the Government Statement on *'The Role of Data Centres in Ireland'*, which in particular recommends having a plan-led approach to data centres, this 55ha site has been identified and zoned as Enterprise (45ha) and Buffer (10ha) with a specific use for a Data Centre Campus due to; its proximity to the electricity sub-station; its proximity to the M18 motorway and adjoining regional road network; the location of the site relative to the Gas Pipeline; the availability of Dark Fibre and the proximity of the site to Shannon International Airport and to Ennis Town.

This site is zoned to accommodate a Data Centre campus which consists of one or more structures, used primarily for the storage, management and dissemination of data and the provision of associated power electricity connections and energy generating infrastructure.

Development proposals for this site shall include the following;

- A Traffic Management Plan for the construction and operation phase of development.
- Any proposed development shall adopt sustainable practice in terms of building design, materials, construction and operation to maximise energy efficiency and conservation.
- A Hydrological Assessment to determine the effects of the development on groundwaters and groundwater quality.
- Located at the southern boundary of the site is a mesotrophic lake, which will require protection through the provision of a buffer incorporating the dense clump of trees to the west of the lake and shall be included in an overall Landscape Management Plan for the site.
- A Construction and Environmental Management Plan shall be submitted as part of development proposals on site. This shall include a Flood Risk Assessment, a Surface Water Management Plan for the construction and operation phase of the development, a Pollution Prevention Plan and shall

incorporate principles of Sustainable Urban Drainage Systems. During the construction phase of development on site, where applicable all relevant best practice guidelines shall be adhered to.

- An Air Quality Impact Assessment with reference to potential impacts on European Sites and the surrounding area within the zone of influence of the proposed development shall be submitted, which shall inform an Appropriate Assessment Screening report and/or Natura Impact Report.

- The hedgerows and scrub area on this site provide a potential foraging and commuting area for wildlife including Lesser Horseshoe bats. Future development proposals must be informed by a series of bat surveys to record the known usage of the site by in particular Lesser Horseshoe bats and ensure that there is no net loss of supporting habitat. The surveys must include a full light spill modelling study. Any habitat loss must be offset by additional landscape planting to ensure connectivity across the landscape.

- Impacts of development on the site on conservation interest bird species of surrounding SPAs and breeding birds should be avoided, through protection and retention of breeding bird habitat in accordance with the Wildlife Acts. Development proposals for the site shall be accompanied by bird surveys (to include a winter bird survey) to assess the use of the site by bird species and where disturbance and/or displacement are predicted appropriate mitigation measures shall be identified. Hedgerow and treeline pruning or removal shall be conducted outside the breeding bird season (March 01st through August 31st).

- An Ecological Impact Assessment (designed by an appropriately qualified landscape architect and ecologist) and a Habitat Survey shall form part of development proposals for the site.

- A Landscape and Biodiversity Management Plan shall be submitted to provide landscape, visual and environmental screening and enhancement measures through planting and design.

- An Invasive Species Survey and Management Plan (if required) shall accompany development proposals for the site.

- Development proposals shall also include an Otter Use Survey of the site, and where disturbance and/or displacement are predicted appropriate mitigation measures shall be identified.

- A buffer will be required to be provided with regard to the location of a National Monument (CL-034-007) on site.

- Adequate wastewater treatment and disposal measures shall accompany development proposals for this site to ensure that there is no impact to water quality in the area.

The proposed Variation wording is presented in Table 3.1 below.

Table 0.1: Proposed Draft Variation to the Clare CDP

Clare CDP 2017-2023 **Vol 3 (a) Ennis Municipal District Written Statement and Settlement Maps**	
Chapter 1.5.2 Lands for Employment Generating Development	
Existing Text	**Variation Text:**

A site (approximately 8.5ha) located in the ***Toureen area*** *on the eastern side of Ennis has been zoned for industrial use* ***(IND1)****. The site has excellent connectivity to the national and regional road network and to Ennis town centre. It is desirable that this site be developed for a small number of large industries with smaller industries being accommodated on other suitably zoned sites in the Plan area. Future development will be subject to the provision of services on the site.*	**ENT 3** Project Ireland 2040 - *National Planning Framework* sets out the strategic importance of data centres in Irelands' Enterprise Strategy. Having regard to the Government Statement on *'The Role of Data Centres in Ireland'*, which in particular recommends having a plan-led approach to data centres, this 55ha site has been identified and zoned Enterprise (45ha) and Buffer (10ha) and for with a specific use for a Data Centre Campus due to; its proximity to the electricity sub-station; its proximity to the M18 motorway and adjoining regional road network; the location of the site relative to the Gas Pipeline; the availability of Dark Fibre and the proximity of the site to Shannon International Airport and Ennis Town. This site is zoned to accommodate a Data Centre campus which consists of one or more than one structure, used primarily for the storage, management and dissemination of data and the provision of associated power electricity connections and energy generating infrastructure.
Chapter 2.13.5	
Site IND1 Toureen *This site is located on the eastern side of Ennis on one of the main approach roads to the town (R352). It is envisaged that these lands will be developed for a small number of large industries and that development will progress in a planned and coherent manner. The lands have been zoned for industrial development, subject to the availability of suitable water and wastewater services. Future development proposals for industrial development on this site must be accompanied by a masterplan for the entire site area and the piecemeal progress of smaller industrial development will not be acceptable to the Planning Authority.*	Site ENT 3 Toureen Project Ireland 2040 - *National Planning Framework* sets out the strategic importance of data centres in Irelands' Enterprise Strategy. Having regard to the Government Statement on *'The Role of Data Centres in Ireland'*, which in particular recommends having a plan-led approach to data centres, this 55ha site has been identified and zoned as Enterprise (45ha) and Buffer (10ha) with a specific use for a Data Centre Campus due to; its proximity to the electricity sub-station; its proximity to the M18 motorway and adjoining regional road network; the location of the site relative to the Gas Pipeline; the availability of Dark Fibre and the proximity of the site to Shannon International Airport and to Ennis Town.

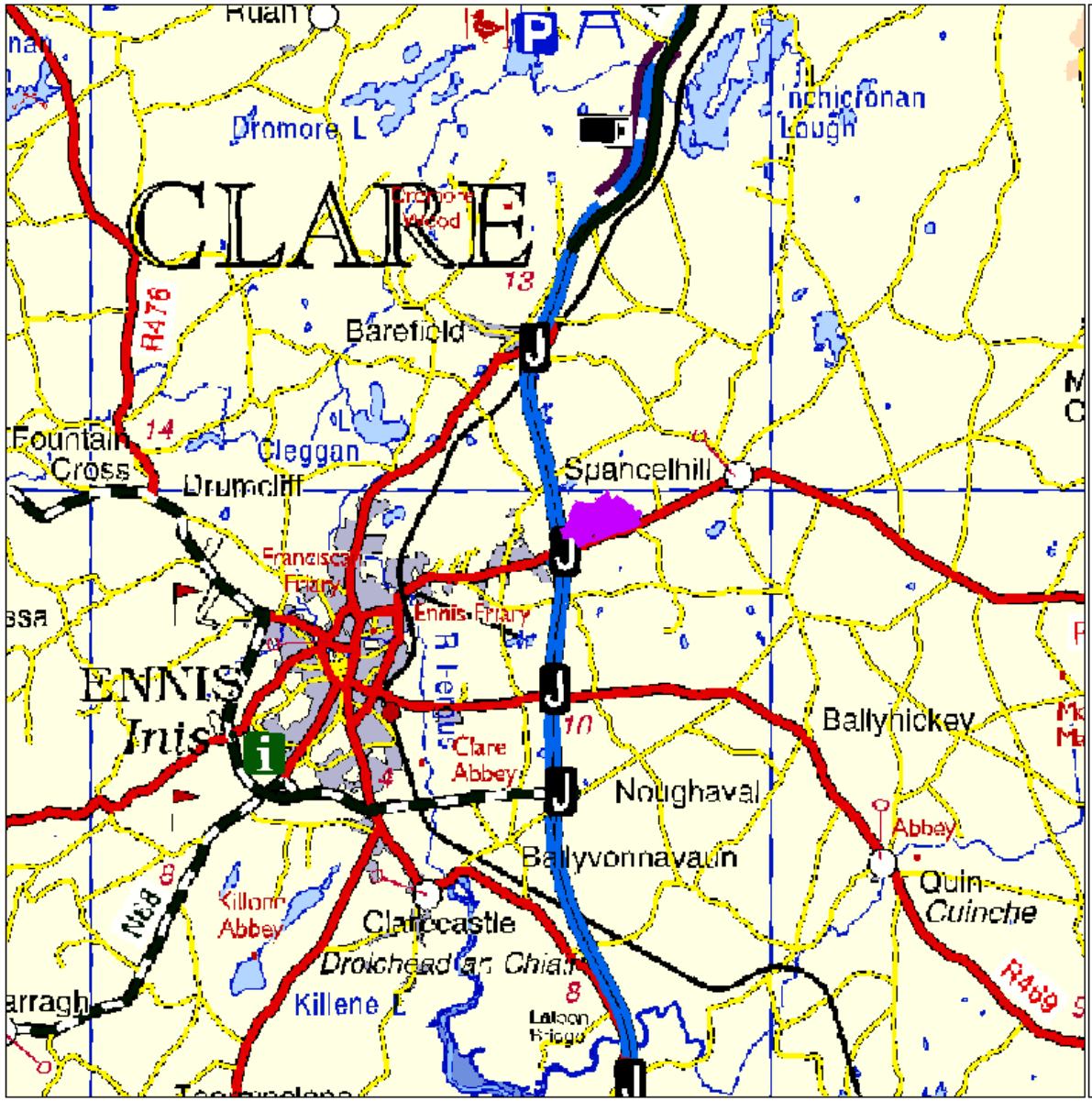
This site occupies a strategic location. It is in close proximity to the national motorway network, providing linkages to all the major cities and to Shannon International Airport. There is also convenient access from the site to Ennis town centre and to other industries located in the Plan area. Due to the potential for large volumes of traffic to be generated by future developments on this site, a Traffic Management Plan must accompany any planning application for this site. *In terms of water management and flood risk, there is a mesotrophic lake located on the southeast boundary of the site. The area surrounding this lake is defined as Flood Zone A. Development proposals on site IND1 must therefore be accompanied by a Flood Risk Assessment and the management of surface water during construction and operation will require the preparation of a Surface Water Management Plan including the implementation of Sustainable Urban Drainage Systems. A buffer area must be retained to protect both the lake and the surrounding cluster of trees. These features must be integrated into an overall Landscape Management Plan for the site. This Landscape Management Plan shall be informed by an ecological assessment which will assess both the lake and surrounding trees and the protection of the ecological value of the wider site, including boundary hedgerows and other valuable linear vegetation corridors.* *The hedgerows and scrub area on this site provide a potential foraging area for Lesser Horseshoe bats. Future development proposals must be informed by a series of bat surveys to record the known use of the scrub and fields by Lesser Horseshoe bats and ensure that there is no loss of habitat for Lesser Horseshoe bats. The surveys must include light-level surveys. Any habitat loss must be offset by additional landscape planting to ensure connectivity across the landscape. All design proposals, including lighting, must be informed by the results of the bat survey. Proposals to*	This site is zoned to accommodate a Data Centre campus which consists of one or more structures, used primarily for the storage, management and dissemination of data and the provision of associated power electricity connections and energy generating infrastructure. Development proposals for this site shall include the following; - A Traffic Management Plan for the construction and operation phase of development. - Any proposed development shall adopt sustainable practice in terms of building design, materials, construction and operation to maximise energy efficiency and conservation. - A Hydrological Assessment to determine the effects of the development on groundwaters and groundwater quality. - Located at the southern boundary of the site is a mesotrophic lake, which will require protection through the provision of a buffer incorporating the dense clump of trees to the west of the lake and shall be included in an overall Landscape Management Plan for the site. - A Construction and Environmental Management Plan shall be submitted as part of development proposals on site. This shall include a Flood Risk Assessment, a Surface Water Management Plan for the construction and operation phase of the development, a Pollution Prevention Plan and shall incorporate principles of Sustainable Urban Drainage Systems. During the construction phase of development on site, where applicable all relevant best practice guidelines shall be adhered to. - An Air Quality Impact Assessment with reference to potential impacts on European Sites and the surrounding area within the zone of influence of the proposed development shall be submitted, which shall inform an Appropriate Assessment Screening report and/or Natura Impact Report. - The hedgerows and scrub area on this site provide a potential foraging and commuting area for wildlife including Lesser Horseshoe bats. Future development proposals must be informed by a series of bat surveys to record the known usage of

mitigate any negative impacts that the proposed development may have on the bat population, prepared by a qualified ecologist, will be required. Proposals for the on-going monitoring of the bat population, and contingency measures if unforeseen impacts arise, must also be submitted.	the site by in particular Lesser Horseshoe bats and ensure that there is no net loss of supporting habitat. The surveys must include a full light spill modelling study. Any habitat loss must be offset by additional landscape planting to ensure connectivity across the landscape. - Impacts of development on the site on conservation interest bird species of surrounding SPAs and breeding birds should be avoided, through protection and retention of breeding bird habitat in accordance with the Wildlife Acts. Development proposals for the site shall be accompanied by bird surveys (to include a winter bird survey) to assess the use of the site by bird species and where disturbance and/or displacement are predicted appropriate mitigation measures shall be identified. Hedgerow and treeline pruning or removal shall be conducted outside the breeding bird season (March 01st through August 31st). - An Ecological Impact Assessment (designed by an appropriately qualified landscape architect and ecologist) and a Habitat Survey shall form part of development proposals for the site. - A Landscape and Biodiversity Management Plan shall be submitted to provide landscape, visual and environmental screening and enhancement measures through planting and design. - An Invasive Species Survey and Management Plan (if required) shall accompany development proposals for the site. - Development proposals shall also include an Otter Use Survey of the site, and where disturbance and/or displacement are predicted appropriate mitigation measures shall be identified. - A buffer will be required to be provided with regard to the location of a National Monument (CL-034-007) on site. - Adequate wastewater treatment and disposal measures shall accompany development proposals for this site to ensure that there is no impact to water quality in the area.

This proposed changes, as detailed in Table 3.1 above will form a variation to the existing Clare CDP 2017-2023 (CDP). This plan came into effect in January 2017 and established the framework for development over a six year period for the County. The CDP was subject to Strategic Environmental Assessment, Habitats Directive Assessment and Strategic Flood Risk Assessment. Within the hierarchy of land use plans, the proposed variation should be compliant with the policies and objectives of the CDP, as well as with national and regional plans and guidelines.

SCALE, NATURE AND LOCATION OF THE TOUREEN LANDS

As outlined above, these lands are currently partly zoned for Industrial Use under the existing Clare CDP 2017 -2023 the remainder is open countryside. These lands are located to the east of Junction 13 on the M18, north of Ennis., The proposed new Enterprise zoning would both alter the land use zoning from Industrial to Enterprise, and extend the size of the Enterprise land use zoning to approximately 45ha with an additional 10ha of lands zoned as Buffer Space. Figure 3.1 presents the proposed Variation Lands at Toureen in relation to County Clare, Figure 3.2 presents an aerial photograph of the same lands.



Clare CDP
Variation No. 1

Figure 3.1

Toureen Site Location

ENT3 Toureen

0 0.5 1 2 Km

N
W E
S

Drawn By	PD
Date	11/12/2018
Data Source	Bing

Clare CDP
Variation No. 1

Figure 3.2

Toureen Site

ENT3 Toureen

Boundary Type

Zoning Boundary

Buffer

0 0.05 0.1 0.2 Km

N
W E
S

Drawn By	PD
Date	11/12/2018
Data Source	Bing

SUMMARY OF THE SCREENING FOR APPROPRIATE ASSESSMENT

A Statement in of Screening for Appropriate Assessment has been completed for the proposed Variation. This Screening was completed in line with the requirements of Article 6(3) of the EU Habitats Directive, as transposed into Irish law in Part XAB of the Planning and Development Act 2000 (as amended) in relation to land use planning.

The Screening represents the first stage of the Article 6(3) Habitats Directive assessment process and was undertaken to identify whether the plan has the potential to result in likely significant effects to European Sites. All European Sites occurring within a 15km buffer distance of County Clare were screened for likely significant effects (the location of these sites with respect to Co. Clare (i.e. the plan area) are shown on Figure 4.1 & Figure 4.2). No European Sites at a distance greater than 15km were considered during the screening as no source-pathway-receptor relationship occurs between lands subject to the proposed Variation and European Sites at such distance from the plan area. The European Sites occurring within 15km of the plan area represented a preliminary list of European Sites to be screened for likely significant effects. The next step in the screening was to identify which European Sites occur within the zone of influence of the plan and could be a risk of likely significant effects by virtue of the spatial relationship or pathway connections between lands subject to the proposed Variation and these European Sites. A total of 25 European Sites (as listed in Table 1.1 above) were identified as occurring within the zone of influence of the proposed Variation and were potentially at risk of likely significant effects due to the overlap, proximity or pathway linking the lands subject to the proposed Variation to these European Sites.

ASSESSMENT OF THE PROPOSED VARIATION

As outlined in section 2.3 above the recommended steps for an Appropriate Assessment are as follows:

1. A description of the elements of the project that are likely to give rise to significant effects to European Sites;

2. The Setting out the Conservation Objectives of the Site;

3. A description of how the project will affect key species and key habitats;

4. A description of how the integrity of the site (determined by structure and function and conservation objectives) is likely to be affected by the project (e.g. loss of habitat, disturbance, disruption, chemical changes, hydrological changes etc.);

5. A description of the mitigation measures that are to be introduced to avoid, reduce or remedy the adverse effects on the integrity of European Sites.

ELEMENTS OF THE PLAN THAT HAVE THE POTENTIAL TO RESULT IN SIGNIFICANT EFFECTS

The proposed Variation comprises two elements, namely the changing of the zoning description of Enterprise land use zones to include reference to data centres and power generating infrastructure and the change in land use zoning of lands at Toureen, Ennis.

The potential effects associated with each element are described separately in the following the subsections.

Potential Effects Arising from the Redefinition of the Enterprise Land Use

1.1.1.1 Data Centre Elements

Whitehead et al (2014) provide the following definition of data centres:

"*Data centres contain IT equipment used for the processing and storage of data and communications networking. They are the backbone of IT networks across the globe and include extensive supporting infrastructures to power and cool the IT equipment*."[1]

As internet access increases and businesses move further online, internet use has become more demanding, and therefore the demand for data centres continues to increase exponentially.

A data centre can be a single data rack in a server room or can extend to large data centres that house multiple data racks, known as data halls. In addition to the data halls themselves, data centres require additional floor space commonly to include power and cooling equipment. The supporting infrastructure can be up to 2 to 4 times greater in terms of floor space than the data halls. Air quality control including dust is critical to data centres so this is carefully controlled and buildings are normally constructed without windows and commonly constructed using a steel frame.

Countries with cooler, temperate climates are often preferred as these reduce the cost of cooling facilities and promote ambient air cooling. In this regard, the climate of Ireland, combined with political stability increases the attractiveness of this country for data centres.

As of April 2018, there are 46 data centres in Ireland, with the largest clusters southwest of Dublin.

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[1] **Whitehead et al. Assessing the Environmental Impacts of Data Centres Part 1: Building and Environment (82) 2014.**

1.1.1.2 Potential Impacts of Data Centre Developments within Enterprise Zones

The change to the zoning description of enterprise land use zones as presented in Section 3 will potentially facilitate the development of land within enterprise zones for data-centres as well as other enterprise related developments. These other developments within the enterprise zones were assessed for their potential to result in likely significant effects to European Sites as part of the Natura Impact Report for the Clare CDP. Likely significant effects from developments within enterprise zones were identified in the NIR of the CDP and these related to:

- Habitat loss and fragmentation: the direct loss of habitat occurring within European Sites as a result of developments within enterprise zones.
- Habitat degradation resulting from emissions to surface water
- Habitat degradation resulting from emissions to groundwater
- Habitat degradation resulting from the spread of non-native invasive species during works within enterprise zones; and
- Disturbance and/or displacement of qualifying species from within or outside European Sites

Appendix 2 of this NIR provides an assessment of the potential for each of these impacts to result in potential adverse effects to the 23 European Sites occurring within the zone of influence of the proposed Variation. Table 5.1 below provides a summary list of the European Sites that will be potentially affected by the five impacts listed above.

Table 5.1 Summary list of European Sites effected

Impact Type	European Sites Effected
Habitat Loss & Fragmentation	Lower River Shannon SAC
Habitat Degradation: Surface Water	Dromore Wood; Inagh River Estuary SAC; Lough Gash Turlough SAC; East Burren Complex SAC; Lower River Shannon SAC; Kilkee Reefs SAC; Cliffs of Moher SPA; Lough Derg (Shannon) SPA; River Shannon and River Fergus Estuaries SPA; Mid-Clare Coast SPA; and Corofin Wetlands SPA.

Impact Type	European Sites Effected
Habitat Degradation: Groundwater	Black Head Poulsallagh Complex SAC; Lough Gash Turlough SAC; Moneen Mountain SAC; Galway Bay Complex SAC; Ballyvaughan Turlough SAC; East Burren Complex SAC; Lower River Shannon SAC; River Shannon and River Fergus Estuaries SPA; and Corofin Wetlands SPA.
Habitat Degradation: Invasive Species	No. The absence of potential effects to European Sites as a consequence of the spread of invasive species is based on the results of the NIR of the Clare CDP.
Disturbance/Displacement to qualifying species	Danes Hole, Poulnalecka SAC; Dromore Woods and Loughs SAC; Moneen Mountain SAC; East Burren Complex SAC; Newhall and Edenvale Complex SAC; Newgrove House SAC; Lower River Shannon SAC; Old Farm Buildings, Ballymacrogan SAC; Ratty River Cave SAC; Kilkishen House SAC; Pouladatig Cave SAC; Cliffs of Moher SPA; Inner Galway Bay SPA; Lough Derg (Shannon) SPA; River Shannon and River Fergus Estuaries SPA; Mid-Clare Coast SPA; and Corofin Wetlands SPA.

Potential Effects Arising from the Change of Land Use Zoning at Toureen

The zoning of lands at Toureen for future development, focusing on data-centre provision will, in the absence of appropriate environmental safeguards and mitigation, have the potential to result in the pollution of surface waters during the construction phase. Any emission of contaminated surface water from development sites at Toureen to surrounding receiving surface waters will have the potential to convey pollution downstream to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA estuary. The input of polluted surface water to these European Sites will have the potential to combine with other sources of water quality pressures to these European Sites and result in deterioration their water quality.

The removal of the hedgerows during the construction phase of developments within the Toureen lands may affect the movements of lesser horseshoe bats between different roost sites and between foraging areas. It is a requirement of the County Development Plan that there is no net loss of potential Lesser Horseshoe feeding habitat, treelines and hedgerows within 3km of known roosts.

The Toureen lands support wetland habitats that may be used by special conservation interest bird species of the Ballyallia Lough SPA. In event that wetland habitats within the Toureen lands are relied

upon by these species, then future development within the Toureen lands, supported by the proposed Variation will have the potential to result in disturbance and loss of habitat for which these species rely.

INTERACTIONS WITH OTHER PLANS

The E.C. Habitats Directive and the Irish Habitats Regulations 2011 require that the impacts on European sites be assessed from the plan or project in question and also in the presence of other plans and projects that could affect the same European sites.

The screening process of the Clare CDP identified the plans that could act in combination with the CDP to pose adverse effects on integrity of European Sites. This section identifies if these Plans have undergone an appropriate assessment themselves as it is assumed that if a Plan has been adopted following an AA then it should not be capable of posing adverse effects on integrity of European Sites.

The cumulative/in-combination impact assessment focused on the other Development Plans that had the highest potential to affect the same European sites that could be affected by the CDP. Other higher-level plans that could promote infrastructure are integrated within the CDP Plan itself and have been assessed as such.

Mid-West Regional Planning Guidelines 2010-2022

The RPGs have undergone an AA and it recommended specific conditions to protect European sites (Section 12.1 of HDA). These were incorporated into the RPGs where appropriate, for example 7.4 Open Spaces and Recreation. No specific threats to the integrity of the Europeans sites were noted in the RPGs. No in-combination impacts with the CDP are predicted as a result of implementation.

Mid-West Area Strategic Plan 2012-2030

The Plan has undergone an AA and concluded that mitigation against potential impacts would primarily be addressed through legislative requirements and therefore no significant impacts were predicted.

The Natura Impact Report also stated that the findings of the AA were integrated into the SEA process. SEA mitigation measures were outlined in Chapter 6 of the Plan. No specific threats to the integrity of the Europeans sites were noted in the Plan. No in-combination impacts with the CDP are predicted as a result of implementation.

Bioenergy Strategy and Action Plan for the Mid West Region, June 2009

The Strategy does not appear to have undergone any AA. The Strategy sits under the Mid-West Region RPGs which was subject to AA. The RPGs placed emphasis on protection of European sites, including renewable and sustainable energy, and the need for AA, for example section 4.2 Planning

and Economic Development and 6.6 Energy and Utilities. No in-combination impacts are predicted as a result of implementation of the Strategy. No in-combination impacts with the CDP are predicted as a result of implementation.

South West Bioenergy Plan 2009 – 2020

The Plan does not appear to have undergone any AA. The Plan covers the counties of Cork and Kerry, and as such, the only European sites that would be considered at risk of in-combination effects are Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA. The Plan was subsequently incorporated into the South West RPGs 2010-2022 which was subjected to an AA. The RPGs placed emphasis on protection of European sites and the need for AA at lower-tier planning, for example Key Planning RKI-01 Key Issues (10), Section 1.5.5, 1.5.6 and 1.5.7. No specific threats to the integrity of the European sites were noted in the Plan. No in-combination impacts from the CDP are predicted as a result of implementation.

County Clare Heritage Plan 2011-2017

The Plan included Objective 3: "*To protect wildlife/biodiversity in both designated sites and throughout the countryside*", and an action to '*Work to ensure that Clare County Council fulfils its obligation under the European Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora)*'. No in-combination impacts were predicted as a result of implementation of the Plan.

Shannon Town and Environs Local Area Plan 2012-2018 (as extended)

The Plan has undergone an AA. The Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA were identified as lying within the Plan area. A specific objective relating to the requirement for AA was included in the LAP (LAP 1), and the requirement to implement the objectives of Clare County Development Plan specifically in relation to protection of European sites was detailed. Amendments were made to land zonings and Plan objectives to protect the Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA, for example LAP Objective 10.8. No in-combination impacts are predicted as a result of implementation of the Plan.

Galway County Development Plan (CDP) 2015-2021 and Wind Energy Strategy (WES) 2011 - 2016

The Galway CDP has undergone an AA. It identified likely significant effects on a number of European sites being considered under the Clare CDP NIR, including but not limited to Galway Bay Complex SAC, East Burren Complex SAC, Inner Galway Bay SPA, Lough Derg SPA and Slieve Aughty Mountains SPA. The NIR includes mitigation measures to avoid impacts on European sites and concludes that the Plan will not have a significant effect on the integrity of the Natura 2000 Network due to the requirement for project level AA and the inclusion of the mitigation measures. No in-combination impacts with the CDP are predicted as a result of implementation.

The Galway WES has undergone an AA and included consideration of impacts on a number of European sites being considered under the Clare CDP NIR, including but not limited to Galway Bay Complex SAC, Inner Galway Bay SPA and the Slieve Aughty Mountains SPA. The WES NIR details general mitigation measures, an overarching objective in relation to protection of European sites and also outlines that project level AA will need to be undertaken for wind energy projects and therefore there will not result in a significant effect on European site integrity. No in-combination impacts with the CDP are predicted as a result of implementation.

Limerick County Development Plan 2010-2016 (as varied)

The Plan has undergone an AA with likely significant effects identified on a number of European sites being considered under the Clare CDP NIR including the Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA.

It stated that there were implications on water-related sites such as the Lower River Shannon, as a consequence of existing environmental problems including the deteriorating of water quality often associated with dispersed settlement or settlements poorly-serviced by infrastructure. Key issues that may impact on water quality in the Shannon Basin specific to the proposed variation were sewage, water abstraction urban drainage and septic tanks, industry and leisure activities.

Safeguards included, for example, that the Lower River Shannon SAC must be considered in the context of settlement planning; and ecological issues must be considered prior to lodging any potential applications relating to wind energy developments in the Shannon coastal zone (with particular reference to the River Shannon and River Fergus SPA).

As a result of the AA screening, it was concluded that the plan would not have likely significant effects on any of the European sites. No in-combination impacts with the CDP are predicted as a result of implementation.

North Tipperary County Development Plan 2010-2016

The Plan has undergone an AA. It described in a matrix in the Appendix the potential direct, indirect and cumulative impacts of the Plan on the designated sites, some of which are sites being considered under the Clare CDP. Safeguards are described in terms of policies and objectives contained within the Plan (described in section 2.3 of the main report) as well as other instruments (described as 'laws/plans/procedures'). Examples of potential indirect impacts of the Plan on the designated sites includes Policy S7: Villages, which states "*It is the policy of the Council to enhance, strengthen and conserve villages within the County, in accordance with their existing size and character*".

Examples of safeguards (described in Chapter 5 and Chapter 8 of the Plan) include Policy HERT 29 Designated Environmental Sites, which states that 'It is the policy of the Council to maintain the quality and conservation value of designated environmental sites, including SACs, cSACs, SPAs, cSPAs, NHAs and pNHAs, and when assessing proposals to provide for the protection, conservation and enhancement of wildlife habitats and designated sites'. Other policies which directly safeguard designated states include Policy HERT, Policy HERT 30 and BNH19.

As a result of the screening, it was concluded that the plan would not have a significant impact on any of the European sites described above. No specific threats to the integrity of the Europeans sites were noted in the Plan. No in-combination impacts with the CDP are predicted as a result of implementation.

Shannon River Basin District Management Plan

The Plan underwent an AA. Safeguards (described as 'mitigation measures' in Appendix I of the AA Screening) are in place for each qualifying interest of the European sites. An example of a common safeguard is the requirement for Appropriate Assessment Screening to be completed for each "Programme of Measures" that will arise from the plan. No in-combination impacts with the CDP are predicted as a result of implementation.

Shannon Catchment-based Flood Risk Assessment and Management (CFRAM) Study

The CFRAM Study was ongoing at the time of the preparation of the CDP. Each CFRAM Study includes the collection of survey data, and the assembly and analysis of meteorological, hydrological and tidal data, which were used to develop a suite of hydraulic computer models. Flood maps are one of the main outputs of the study and are the way in which the model results are communicated to each of the end users. The studies then assessed a range of potential options to manage the flood risk, and could be recommended for implementation within the Flood Risk Management Plans. Within County Clare the settlements of Ennis, Sixmilebridge, Shannon, Kilrush, Kilkee, Quin and Bunratty were identified as Areas for Further Assessment and for which options to manage flood risk have been put forward.

There is the potential for interactions between the development implemented as a result of the CDP and the flood management measures that may be recommended by the CFRAMS. For example the construction of flood walls, embankments, flood storage basins or attenuation areas can all change the flooding regime within a catchment both upstream and downstream. This can have adverse effects on the integrity of European sites where qualifying interest habitats such as alluvial woodland, mudflats, alkaline fens and species such as Freshwater Pearl Mussel, Salmon, Otter and Lamprey species amongst others, are present.

Following the publication of the Draft CFRAMS in Q1 of 2016 the following options were brought forward in relation to the 5 settlements as follows;

- Quin
- Kilrush
- Shannon
- Bunratty
- Kilkee

While Sixmilebridge and Ennis were identified as "Areas for Further Assessment" as they both have schemes either in existence or under construction they were not considered further than the AFA stage.

For all others AFA's in Clare they each went through four steps as follows;

Screening of Measures

Selection of Options

Appraisal of Options

Multi Criteria Assessment

Recommendation of Preferred Options

Bunratty
Measures Screened in
Existing Regime
Flood Defenses
Flood Forcasting/Warning/Response
Public Awareness
Individual Property Resilience

Recommendation of Preferred Option
Existing Regime
Flood Defences; New Defences

Kilkee
Measures Screened in
Increase conveyance
Flood Defences
Public Awareness
Individual Property Resilience

Recommendation of Preferred Option
Existing Regime
Increase Conveyance – structure enhancement/works
Flood Defences – new
Flood Defences – Raise existing

Kilrush
Recommendation of Preferred Option
Construct Flood Defences
Public Awareness

Shannon

Measures Screened in

Existing Regime
Storage
Flow Diversion
Increase Conveyance
Flood Defences
Flood Forcasting
Public Awareness
Individual Property Resilience
Individual Property Resistance

Recommendation of Preferred Option

Existing Regime
Online Storage
Other Storage
New Flood Defences
Flood Relief Channel
Structure Enhancement/Works

Quin

Screened in

Do nothing
Existing Regime
Public Awareness

Recommendation of Preferred Option

Nothing viable no recommended option

The recommended preferred options as they currently stand have been subject to rigorous environmental assessment including Multi Criteria Analysis which contains Environmental Criterion. Since the CFRAMS studies are still at the draft stage and as the options may still change following the statutory consultation process, it is too early to identify where there may be conflicts or potential for in-combination impacts arising. Therefore it is recommended that during the subsequent stages of the CFRAMS study that all proposals for works are in full compliance with the Objectives of the CDP 2017-2023 and are consistent with the zoning proposals in the Settlement Plans.

Wild Atlantic Way

The Fáilte Ireland Wild Atlantic Way (WAW) Operational Programme underwent an Appropriate Assessment in 2015. The Operational Programme for the WAW sets out a strategy and an implementation framework and programme for the sustainable development of the WAW over the period 2015-2019. The direct zone of influence of the WAW is the coastal zone but the

"Programme Area" for the purpose of the Operational Programme included the nine western coastal counties, Donegal, Sligo, Leitrim, Mayo, Galway, Clare, Limerick, Kerry, and Cork. For this reason six geographic zones have been identified to simplify various aspects of the WAW.

The NIR states that the following outcomes are expected following the implementation of the Operational Programme:

*"*An increase in the number of paid bed-nights in the programme area.*

An increase in the satisfaction ratings among visitors to the Wild Atlantic Way.

Growth in the number of overseas visitors engaging with the Wild Atlantic Way on social media platforms.

An increase in the levels of awareness of the Wild Atlantic Way among overseas visitors.

**An increase in the average length of stay of visitors to the programme area.*

An increase in revenue from overseas visitors.

**Greater spread / dispersal of visitors throughout the programme area.*

**Season extension into the shoulder and off-peak months.*

**An increase in the number of repeat visits by overseas holidaymakers.*

Growing employment levels within tourism.

**Growing commercial opportunities as a result of the Wild Atlantic Way.*

**Increase in the number of tourism businesses working collaboratively and developing tourism experiences.*

High levels of positive engagement and sense of ownership by local communities with the Wild Atlantic Way.

Awareness is raised among communities and visitors of the unique Irish Atlantic heritage, culture and wildlife.

The Operational Programme demonstrates full compliance with all relevant requirements arising from EU and Irish planning and environmental legislation.

The Wild Atlantic Way facilitates the protection and enhancement of the environment of the West of Ireland, in association with other key stakeholders."

The outcomes marked * above (our emphasis) would be regarded to be consequences that could (in the absence of mitigation) interact with Clare County Development Plan 2017-2023 to pose likely significant effects that could lead to adverse effects on the integrity of European sites. The consequences of increased tourism were identified as habitat loss, fragmentation and disturbance of certain species associated with increased pedestrian movements, demand for parking and other resources.

Mitigation measures that will interact, or be applied to proposals that are also part of the Clare CDP and are relevant to the protection of European Sites are summarised as follows:

Focus on increasing the number of bed-nights spent along the WAW route rather than an increased number of visitors to the study area to alleviate potential pressures during peak season at sensitive sites.

A proposed Monitoring Strategy will aid the anticipation and avoidance of an increase in environmental loadings on the environment, therefore reducing the risk of habitat loss due to excessive pressures on natural habitats.

An Appendix "Environmental Management for Planning Authorities" provides details as to how these bodies, including Clare County Council will address the potential consequences of the Operational programme. Measures that go beyond statutory requirements (e.g. requirement for AA Screening or compliance with other Directives and Regulations) are summarised below:

Planning authorities shall cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management.

The inclusion of a Construction and Environmental Management Plan will safeguard the integrity of the Natura 2000 network of sites by minimising the potential for habitat loss, disturbance of species and potential adverse impacts on water quality/quantity dependant sites.

The development of Maintenance Plans will ensure that works/developments to be undertaken will comply with relevant environmental legislation and that works will be carried out in an ecologically sensitive manner.

No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this programme (either individually or in combination with other plans or projects).

Planning authorities shall engage with the National Parks & Wildlife Service to ensure Integrated Management Plans are prepared for all Natura sites (or parts thereof) and ensure that plans are fully integrated with the Operational Programme and other plans and programmes, 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.

Planning authorities shall demonstrate that works will be undertaken in accordance with best practice and planning authorities shall, as appropriate: support measures to protect the coast, the coastal edge and coastal habitats; and facilitate an Integrated Coastal Zone Management approach to ensure the conservation, management and projection of manmade and natural resources of the coastal zone.

Planning authorities shall demonstrate, as appropriate, protection and enhancement of biodiversity and ecological connectivity, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, geological and geomorphological 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.

Planning authorities shall demonstrate that waterbodies and watercourses are protected 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.

Planning authorities shall demonstrate the appropriate protection of non-designated habitats and landscapes and to conserve the biological diversity.

Planning authorities shall support, as appropriate, the National Parks and Wildlife Service's efforts to seek to control the spread of non-native invasive species on land and water.

Planning authorities shall ensure that new development is adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems as appropriate.

Local Authorities shall work with Fáilte Ireland, the National Trails Office, Coillte, the Department of the Environment, Heritage and Local Government and the Department of Transport, Tourism and Sport, and other relevant stakeholders, to improve on the existing level of infrastructure and facilities for walking, cycling and water-based activities along the Wild Atlantic Way.

Planning authorities shall demonstrate that all waste arising during construction phase will be managed and disposed of in a way that ensures the provisions of the Waste Management Acts and regulations and any of the relevant Local Authorities Waste Management Plans. Construction Waste Management Plans will be implemented by planning authorities to minimise waste and ensure correct handling and disposal of construction waste streams in accordance with the *Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects, Department of the Environment*, July 2006.

Relevant Objectives in the CDP include CDP9.6 which includes several sub-objectives to promote and manage the Wild Atlantic Way in County Clare. CDP 9.6E notes the use of navigational aids including signage to provide ease of access to entry and exit points. These measures when implemented in combination with the monitoring provisions recommended in the WAW NIR could potentially provide mechanisms whereby the potential adverse effects of the WAW may be addressed.

Freshwater Pearl Mussel Second Draft Cloon (Shannon Estuary) Sub-Basin Management Plan

The plan aims to improve and protect key environmental conditions to support Freshwater Pearl Mussels (FWPM) in the Lower River Shannon SAC (Cloon catchment) and sets out a summary action programme for the catchment (see Chapter 7 of the Plan). The national plans collectively were subject to AA and the following potential impacts arising from implementation of the programme of measures were identified:

- Reduction in number of certain feeding bird species as a result of less primary productivity due to increased water quality and therefore a reduced food source;
- Potential barrier to entry to water courses and habitat of certain species due to inappropriate agricultural fencing e.g. otter, Plover chicks etc.;
- Alternation and loss of habitat to certain species due to plantation of woodlands on agricultural lands;
- Increasing loading of nutrients and suspended solids to rivers caused by tankering of wastewater;
- Alternation and habitat loss due to removal of bank-side trees for certain species e.g. Merlin; and
- Alternation and habitat loss due to planting of woodland and encouragement of riparian vegetation in open bank side and floodplain habitats for certain species, e.g. Kingfisher.

The NIR also specifically identifies potential impacts for each individual FWPM Sub Basin Management Plan. For the Cloon catchment, the NIR identifies potential likely significant effects on Otter *Lutra lutra* in the Lower River Shannon SAC and on Golden Plover *Pluvialis apricaria* in the River Shannon and River Fergus Estuaries SPA as a result of habitat fragmentation and disturbance and sets out mitigation measures in relation to same (see section 4.4 of the NIR). No in-combination impacts with the CDP were predicted as a result of implementation.

Killaloe Bypass

Following a series of interactions through courts arising from an application for Judicial Review pursuant to the An Bord Pleanala approval to the project in early 2013, the Supreme Court upheld the previous High Court decision, by rejecting the most recent appeal, in mid-November,

2016 meaning that the legal process is now concluded and the project is approved to proceed towards the construction stage. Notices to Treat were served at the end of August 2016 and the submissions received in response to same are being examined at present. The Council is presently pursuing funding to facilitate the next significant stage of development of the project that which will cater for acquisition of the land as approved under the project CPO.

The NIS for the project identified no significant impacts on the Qualifying habitats or species of the Lower River Shannon SAC as they do not occur within the footprint of the scheme. Habitat loss, habitat fragmentation and disturbance were identified as potential impacts on the Qualifying Interest species which include Atlantic Salmon, Lamprey spp. and Otter. Deterioration in water quality was also noted as a potential impact in the NIS. Safeguards (described as mitigation measures in section 9 of the NIS) were proposed and include an extensive list of water quality/pollution prevention measures arising from the relevant best practice guidelines as well as measures for Otter, aquatic habitats, terrestrial habitats and invasive alien species. The NIS concluded that with appropriate mitigation in place there will be no significant impact on any European sites. No in-combination impacts with the CDP were predicted as a result of implementation.

MITIGATION MEASURES

MITIGATION MEASURES RELATING TO THE PROPOSED CHANGE IN THE DEFIINITION OF ENTERPRISE ZONES

The Clare County Development Plan 2017-2023 SEA and NIR identified a number of mitigation measures, that upon their adoption and implementation, the CDP was found not to have the potential to result in likely significant effects to European Sites. These measures provide environmental safeguards for all future land use developments, including enterprise developments within the county. It is considered that these safeguards will provide sufficient environmental protection to ensure that the proposed change in the zoning description of the enterprise land use zone within the county and the subsequent land use development supported by it will not have the potential to result in likely significant effects to European Sites.

The specific mitigation measures and environmental safeguards that will apply to all future enterprise land use developments that are highlighted in the following sub-sections are also reinforced by a range of policies and objectives of the CDP, the intention of which is to protect the environment and promote sustainable development. These policies and objectives are outlined in Appendix 3 to this NIR.

MITIGATION MEASURES RELATING TO THE PROPOSED VARIATION INVOLVING ZONING OF LANDS AT TOUREEN

Habitat loss & Fragmentation

In advance of any future development in this zone a habitat survey will be required to be completed in order to identify the habitats present within the footprint and adjacent to the proposed development and to identify whether any habitats representative of habitats listed on Annex 1 of the EU Habitats Directive will be affected. Surveys will also be required to identify whether any habitats occurring

within these lands play an important conservation role in supporting mobile Annex II species (i.e. lesser horseshoe bats) or special conservation interest bird species of surrounding European Sites.

A Construction Environmental Management Plan (CEMP) and/or a schedule of protective measures will be required as part of any planning application for development detailing how surface water run-off, especially in relation to release of silt and other pollutants, will be controlled during construction. The design of the project will be required to include elements to ensure that surface water run-off during operation is treated via a combination of appropriate SUDS (i.e. green roofs, permeable paving, petrol interceptor, silt trap) prior to discharge to any surface water features.

Mitigation Measures Relating to Habitat Degradation: Surface water quality

Any future developments within these lands that have been identified as having the potential to result in a deterioration to surface water quality will be required to undertake an assessment to determine the effect of the development on surface waters and surface water quality. Such an assessment will be required to identify the materials and activities associated with the development that could result in pollution to surface waters, the pathways that could convey surface water from the development site to European Sites and the qualifying features of interest of European Sites that could be at risk of experiencing adverse effects in the event of the release of polluted surface water from the development site.

During the construction phase of developments within these lands, where applicable all relevant best practice guidelines shall be adhered to. Examples of these guidelines include:

- Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters (Inland Fisheries Ireland, 2016);
- Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes (National Roads Authority, 2008);
- CIRIAC648: Control of water pollution from linear construction projects: Technical Guidance
- CIRIAC649: Control of water pollution from linear construction projects: Site guide

A Pollution Prevention Plan (PPP) and Construction and Environmental Plan (CEMP) will be required to accompany future developments in these lands that have been identified as presenting a risk of likely significant effects to European Sites.

Measures will be required to be included in the design of a proposed development that will safeguard water quality from operation phase surface water emissions and wastewater emissions. These design elements will require the inclusion of adequate wastewater treatment facilities/connection to wastewater treatment plants, the implementation of surface water management measures such as swales, interceptors, hydrobrakes and attenuation tanks etc.

The assessment of potential effects to surface water quality along with the PPP and CEMP and the design of the operation phase of development will be assessed for their potential to result in, and in turn prevent, likely significant effects to European Sites. Proposed developments will only be permitted in instances where it is demonstrated, beyond reasonable scientific doubt, that the proposed development will not, alone or in combination with other plans or projects, result in likely significant effects to European Sites.

Mitigation Measures Relating to Habitat Degradation: groundwater quality

Any future developments within these lands that have been identified as having the potential to result in deterioration to groundwater quality will be required to undertake a hydrogeological assessment to determine the effect of the development on groundwaters and groundwater quality. If groundwater impacts are likely, an assessment of the zone of influence of any such interaction will be carried out with respect to identifying if there is any risk of groundwater impacts affecting the hydrogeological regime supporting qualifying habitats and/or species that are reliant on groundwater processes. Where such impacts are identified, appropriate mitigation measures will be designed and implemented to ensure that the development will not adversely affect the integrity of any European sites, either alone or in-combination with any other plans or projects, by impacting on the existing hydrogeological regime.

Mitigation Measures relating to habitat degradation: Invasive Species

No baseline information reviewed to date for the Toureen lands has identified the presence of non-native invasive species within these lands and has not identified the potential for development within these lands to result in the spread of invasive species. However, precautionary mitigation measures are provided to ensure that any future developments within these lands do not result in the spread of such species and any associated adverse effects to European Sites.

It will be a requirement of any future development application that a survey for the presence or otherwise of invasive species within the development site and areas affected by the development is completed. If invasive species are identified during such surveys, their species will be identified and their location will be mapped. An Invasive Species Management Plan will be required to detail the measures required to ensure that the proposed development does not result in the spread of the invasive species and to ensure that the species is eradicated from the development footprint.

Mitigation measures relating to disturbance & displacement effects to qualifying species

The Annex II qualifying species of European Sites that have been identified as being at risk of disturbance and/or displacement as a result of future developments within the lands subject to the proposed variation at Toureen are lesser horseshoe, otters and special conservation interest bird species of SPAs.

Lesser Horseshoe Bats

It will be a requirement for any future development application within these lands, that has been identified as having the potential to result in adverse effects to the population of lesser horseshoe bat

supported by SACs, that the application is accompanied by a full bat survey, particularly in relation to Lesser Horseshoe bats' usage of the site, and a full light-spill modelling study to demonstrate that the chosen lighting design would not create any increase in ambient light levels beyond the perimeter of the development footprint.

Where lesser horseshoe bats are identified as relying on habitats within the proposed development site, mitigation measures must demonstrate how the development can be achieved without resulting in adverse effects to habitat resource upon which lesser horseshoe bats rely.

Otters & Qualifying Freshwater Species

It will be a requirement that any future development application within these lands, that has been identified as having the potential to result in adverse effects to a population of otters supported by SACs, that an appropriate level of survey will be required to identify if, and how, otters utilise habitat areas potentially affected by disturbance/displacement effects associated with any element of a proposed development. The results of these surveys will be required to support an assessment of the developments potential to result disturbance/displacement effects otters and whether such effects would affect the conservation objectives supporting the species' favourable conservation status, and thus adversely affect the integrity of the related SAC.

Where disturbance or displacement effects are predicted, appropriate mitigation measures will be required to ensure that development will not adversely affect the conservation status of otters and the integrity of related SACs, either alone or in- combination with any other plans or projects, via this impact pathway.

If, despite the implementation of mitigation measures, there remains a risk that disturbance or displacement will adversely affect the conservation status of otter populations for which SACs are designated and thus the integrity of the related European Site, the project will not be progressed unless an alternative solution can be implemented which avoids/reduces the impact to a level that the integrity of the related European Site remains unaffected.

Special Conservation Interest Bird Species

It will be a requirement for any future development application within these lands, that has been identified as having the potential to result in adverse effects to the populations of special conservation interest bird species of surrounding SPAs, that an appropriate level of survey will be required to identify if, and how, such bird species utilise habitat areas potentially affected by disturbance/displacement effects associated with any element of a proposed enterprise development. The results of these surveys will be required to support an assessment of the developments potential to result in disturbance/displacement effects on bird species and whether such effects have the potential to impact the conservation objectives supporting the species' favourable conservation status, and thus adversely affect the integrity of the related SPA.

Where disturbance or displacement effects are predicted, appropriate mitigation measures will be required to ensure that development will not adversely affect the conservation status of special

conservation interest bird species and the integrity of related SPAs, either alone or in- combination with any other plans or projects, via this impact pathway.

If, despite the implementation of mitigation measures, there remains a risk that disturbance or displacement will adversely affect the conservation status special conservation interest bird populations for which SPAs are designated and thus the integrity of the SPA, the project will not be progressed unless an alternative solution can be implemented which avoids/reduces the impact to a level that the integrity of the related SPA remains unaffected.

Mitigation measures that form Part of the Proposed Variation

Whilst all the mitigation measures outlined in Section 6.2.1 to 6.2.8 above will be required to be implemented for any particular development within the lands at Toureen, the wording of the proposed variation has sought to incorporate a range of environmental safeguards from the outset. These measures are outlined in the proposed variation text as described in Section 3 above. The environmental safeguards that are relevant to the protection of the conservation status of surrounding European Sites are highlighted below. These safeguards will also be required to be adhered to during any future project developments within the Toureen lands.

- A Hydrological Assessment to determine the effects of the development on groundwaters and groundwater quality.

- Located at the southern boundary of the site is a mesotrophic lake, which will require protection through the provision of a buffer incorporating the dense clump of trees to the west of the lake and shall be included in an overall Landscape Management Plan for the site.

- A Construction and Environmental Management Plan shall be submitted as part of development proposals on site. This shall include a Flood Risk Assessment, a Surface Water Management Plan for the construction and operation phase of the development, a Pollution Prevention Plan and shall incorporate principles of Sustainable Urban Drainage Systems. During the construction phase of development on site, where applicable all relevant best practice guidelines shall be adhered to.

- An Air Quality Impact Assessment with reference to potential impacts on European Sites and the surrounding area within the zone of influence of the proposed development shall be submitted, which shall inform an Appropriate Assessment Screening report and/or Natura Impact Report.

- The hedgerows and scrub area on this site provide a potential foraging and commuting area for wildlife including Lesser Horseshoe bats. Future development proposals must be informed by a series of bat surveys to record the known usage of the site by in particular Lesser Horseshoe bats and ensure that there is no net loss of supporting habitat. The surveys must include a full light spill modelling study. Any habitat loss must be offset by additional landscape planting to ensure connectivity across the landscape.

- Impacts of development on the site on conservation interest bird species of surrounding SPAs and breeding birds should be avoided, through protection and retention of breeding bird habitat in

accordance with the Wildlife Acts. Development proposals for the site shall be accompanied by bird surveys (to include a winter bird survey) to assess the use of the site by bird species and where disturbance and/or displacement are predicted appropriate mitigation measures shall be identified. Hedgerow and treeline pruning or removal shall be conducted outside the breeding bird season (March 01st through August 31st).

- An Ecological Impact Assessment (designed by an appropriately qualified landscape architect and ecologist) and a Habitat Survey shall form part of development proposals for the site.

- A Landscape and Biodiversity Management Plan shall be submitted to provide landscape, visual and environmental screening and enhancement measures through planting and design.

- An Invasive Species Survey and Management Plan (if required) shall accompany development proposals for the site.

- Development proposals shall also include an Otter Use Survey of the site, and where disturbance and/or displacement are predicted appropriate mitigation measures shall be identified.

- Adequate wastewater treatment and disposal measures shall accompany development proposals for this site to ensure that there is no impact to water quality in the area.

EVALUATION OF MITIGATION MEASURES

This section highlights the types of potential likely significant effects that arose during this part of the assessment and how likely significant effects were mitigated to ensure no potential adverse effects on the integrity of European sites would occur.

Impacts on Water quality

Potential Likely Significant Effect: Potential for impacts on water quality as a result of inadequate wastewater treatment and surface water management and treatment and discharge with downstream impacts to a receiving watercourse.

How Mitigation Will Ensure Likely Significant Effects Are Avoided: Ensure any future development application is connected to a WWTP with adequate capacity for foul water during operation, or that it is serviced by an on-site treatment system that will ensure no impact to water quality in the area. Require future developments to include surface water management design measures that will aim to ensure only clean surface water is discharged from the proposed development during the construction phase and operation phase.

Impact on Lesser Horseshoe Bats

Potential Likely Significant Effect: Removal of hedgerows/treelines/scrub could potentially impact on the foraging/commuting/roosting habitat of Lesser Horseshoe Bats.

How Mitigation Will Ensure Likely Significant Effects Are Avoided: Ensure that any development application is accompanied by a full bat survey, particularly in relation to Lesser Horseshoe bats' usage of the site, and a full light-spill modelling study to demonstrate that the chosen lighting design would not create any increase in ambient light levels beyond the perimeter of the development footprint. Proposed developments will be required to demonstrate that there will not be an adverse effect to the populations of lesser horseshoe bat SACs, should they be found to rely on habitats within enterprise zones.

These measures will ensure the requirement for development proposals to ensure there are no adverse effects on the conservation status of lesser horseshoe bats and the integrity of SACs .

Impact to Otters and Qualifying Freshwater Species

Potential Likely Significant Effect: Potential adverse effects to otters and qualifying freshwater species will have the potential to arise as a result of the discharge of contaminated water from development sites during the construction phase and operation phase.

How Mitigation Will Ensure Likely Significant Effects Are Avoided: Ensure that any development application identifies the potential risk to these species. Proposed development will be required to incorporate construction phase and operation phase surface water and wastewater management measures. Proposed developments will be required to demonstrate that these measures will be capable of ensuring that adverse effects to water quality will be avoided.

Impact On Special Conservation Interest Bird Species

Potential Likely Significant Effect: Potential for disturbance to and displacement of species from suitable wetland habitats occurring within or adjacent to enterprise zones.

How Mitigation Will Ensure Likely Significant Effects Are Avoided: Ensure that any development application identifies the presence or otherwise of suitable habitat for special conservation interest bird species within or immediately adjacent to development sites. Where such habitat exists surveys will be required to establish whether such species are relying on these habitats and whether these habitats play a role in maintaining the conservation status of these species and thus the integrity of the related SPA. In such circumstances the development will be required to demonstrate how it will avoid potential disturbance and/or displacement to these bird species from the habitat upon which they rely.

These measures will ensure the requirement for development proposals to ensure there are no adverse effects on the conservation status of bird species and the integrity of SACs will be considered for approval during the planning application process.

Impacts on groundwater

Potential Likely Significant Effect: Potential for impacts on the hydrology of groundwater-dependent Qualifying Interests of European sites (e.g. turloughs, petrifying springs).

How Mitigation Will Ensure Likely Significant Effects Are Avoided: Ensure any future development application is connected to a WWTP with adequate capacity for foul water during operation, or that it is serviced by an on-site treatment system that will ensure no impact to groundwater quality in the area. Require future developments to include surface water management design measures that will aim to ensure only clean water is discharged from the proposed development during the construction phase and operation phase.

Impacts caused by Invasive Species

Potential Likely Significant Effect: Potential for introduction or spread of aquatic/terrestrial invasive species to European sites.

How Mitigation Will Ensure Likely Significant Effects Are Avoided: An invasive species survey will be required at development sites and where such species are identified a management plan that will outline measures to eradicate the species and avoid its spread will be required.

Disturbance impacts on sensitive species

Potential Likely Significant Effect: Potential for impacts on nesting habitat of SPA bird species e.g. Merlin (i.e. woodland).

Mitigation: Any development proposals should include an assessment by a suitably-qualified Ecologist as to the potential for the site to support SPA SCI bird species. If the site is deemed suitable, detailed bird surveys should be undertaken on the site. These assessments and/or surveys should inform an Appropriate Assessment Screening Report and/or Natura Impact Statement, dependent on the outcome of the site survey. If the site is deemed suitable, a full light-spill modelling study should accompany all development proposals and demonstrate that the chosen lighting design would not create any increase in ambient light levels beyond the perimeter of the development footprint in relation to SCI birds.

CONCLUSION STATEMENT

The outcome of the evaluation of the mitigation measures proposed as part of this NIR has found that the implementation of these measures will provide sufficient safeguards to ensure that their inclusion as part of this proposed Variation, taken together with the implementation of the objectives of the CDP and compliance with the Municipal District Settlement Statements and Plans, will have no adverse effects on the integrity of European sites in the area.

RESPONSIBILITY FOR IMPLEMENTING MITIGATION MEASURES

The responsibility for implementing the proposed Variation to the Clare CDP 2017-2023 lies solely with the Planning Authority through the Planning Consent process. Applicants who intend to develop

within the CDP area are obliged to ensure that their application is consistent with the Objectives and requirements within the Plan. The statutory requirement for the Planning Authority to carry out screening for appropriate assessment for all planning applications is not affected by any of the statements in this NIR. All applications must be tested for the potential for likely significant effects. However, such effects are not likely to occur if the Objectives in the CDP and the requirements are adhered to as outlined in Technical Guidance, where appropriate.

Applicants must provide information to allow the Planning Authority to screen the application and decide if a Natura Impact Statement is required.

MONITORING OF MITIGATION MEASURES

Whilst there is no legal requirement to monitor the outputs of the AA process, there is an obligation to monitor the implementation of the CDP through the E.C. SEA Directive as implemented in Ireland. Contingency measures may have to be applied if there is evidence that Objectives cannot be implemented successfully. The *European Communities (Environmental Liability) Regulations 2008* will also apply in the event of any environmental damage to habitats and species both within and outside of the European sites.

CONCLUSION

The potential impacts that could negatively affect the European Sites in the area have been outlined in Section 5 and Appendix 2 of this NIR. Section 6 outlines the environmental safeguards within the Plan that aim to ensure these potential impacts are avoided.

The requirements outlined in Section 6 and evaluated in Section 7 of this NIR will protect these Sites from potential adverse impacts. All new development proposals will require Screening for Appropriate Assessment and where necessary an Natura Impact Statement.

This NIR has reviewed the impacts arising from the proposed Variation and has determined that, assuming the successful inclusion of the mitigation measures proposed in this NIR, taken together with the objectives of the Written Statement of the County Development Plan and compliance with the Municipal District Settlement Statements and Plans, the proposed Variation will have no adverse effects on the integrity of European sites in the area.

APPENDIX 1

The qualifying features of interest for each of these sites along with their current status, generic conservation management objectives and the conditions underpinning site integrity are provided in Table A1.

Table A.0.1: Details of European Sites occurring within the zone of influence of the Proposed Variation

Site Name and Code	Qualifying Interests	Current Conservation Status[2]	Conservation Management Objectives[3]	Conditions underpinning site integrity
Candidate Special Areas of Conservation (SACs)				
Danes Hole, Poulnalecka SAC (000030)	Annex I habitats: • Caves not open to the public [8310] • Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0] Annex II Species: • Lesser horseshoe bat *Rhinolophus hipposideros* [1303]	Annex I habitats: • Caves not open to the public [8310] – Favourable • Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0] - Bad Annex II Species: • Lesser horseshoe bat *Rhinolophus hipposideros* [1303] - Favourable	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: The qualifying interests of the European site as listed in columns to the left	• Appropriate levels of development in the vicinity • Appropriate agricultural practices including grazing pressures • Connectivity between sites • Maintenance of foraging habitat • Appropriate levels of disturbance • Appropriate levels of grazing
Black Head Poulsallagh Complex SAC (000020)	Annex I habitats: • Reefs [1170] • Perennial vegetation of stony banks [1220] • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho=Batrachion vegetation [3260]	Annex I habitats: • Reefs [1170] –Bad • Perennial vegetation of stony banks [1220] – Inadequate • Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho=Batrachion	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: The qualifying interests of the European site as listed in columns to the left	• Water quality including nutrient levels, water clarity, sediment levels • Water levels • Calcium rich conditions • Low nutrient waters • Surface and ground water flow • Scrub management • Appropriate levels of disturbance • Appropriate levels of grazing

[2] Sourced from Status of EU Protected Habitats and Species in Ireland (NPWS, 2013a and 2013b) for SACs, and from Birds of Conservation Concern in Ireland 2014-2019 (Colhoun and Cummins, 2014) for SPAs.

[3] Sourced from Site Conservation Objectives (www.npws.ie accessed 28/10/14)

	• Alpine and boreal heaths [4060] • *Juniperus communis* formations on heaths or calcareous grasslands [5130] • Semi-natural dry grasslands and scrubland facies on calcareous grasslands [6210] • Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) [6510] • Petrifying springs with tufa formation (Cratoneurion) [7220] • *Limestone pavements [8240] • Submerged or partially submerged sea caves [8330] <u>Annex II Species</u> • Petalwort *Petaphyllum ralfsii*	vegetation [3260] –Inadequate • Alpine and boreal heaths [4060] –Bad • *Juniperus communis* formations on heaths or calcareous grasslands [5130] – Inadequate • Semi-natural dry grasslands and scrubland facies on calcareous grasslands [6210] – Inadequate • Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) [6510] –Bad • Petrifying springs with tufa formation (Cratoneurion) [7220] –Inadequate • *Limestone pavements [8240] –Inadequate • Submerged or partially submerged sea caves [8330] - Favourable <u>Annex II Species</u> • Petalwort *Petaphyllum ralfsii* [1395] - Favourable		• Maintenance of nursery, transitional and hibernation habitats • Maintenance of foraging habitat • Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality • Appropriate agricultural practices including grazing pressures • Riparian habitat prone to flooding
Dromore Woods and Loughs SAC (000032)	<u>Annex I habitats:</u> • Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation [3150] • Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	<u>Annex I habitats:</u> • Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation – Unfavourable/Inadequate • Hydrophilous tall herb fringe communities of plains	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: The qualifying interests of the European site as listed in columns to the left	• Water quality including nutrient levels, water clarity, sediment levels • Water levels • Surface water movements • Scrub management • Appropriate levels of disturbance • Maintenance of nursery habitats • Maintenance of foraging habitat

	[6430] • *Limestone pavements [8240] <u>Annex II species</u> • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303] • Otter *Lutra lutra* [1355]	and of the montane to alpine levels – Unfavourable/Bad • *Limestone pavements – Unfavourable/Inadequate <u>Annex II species</u> • Lesser Horseshoe Bat *Rhinolophus hipposideros* – Favourable • Otter *Lutra lutra* - *Favourable*		• Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality
Inagh River Estuary SAC (000036)	<u>Annex I Habitats</u> • *Salicornia* and other annuals colonising mud and sand [1310] • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] • Mediterranean salt meadows Juncetalia maritime) [1410] • Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] • *Fixed coastal dunes along the shoreline with herbaceous vegetation (grey dunes) [2130]	<u>Annex I Habitats</u> • *Salicornia* and other annuals colonising mud and sand [1310] - Inadequate • Atlantic salt meadows (GLauco-Puccinellietalia maritimae) [1330] - Inadequate • Mediterranean salt meadows Juncetalia maritime) [1410] - Inadequate • Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120] - Inadequate • *Fixed coastal dunes along the shoreline with herbaceous vegetation (grey dunes) [2130] - Bad	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: The qualifying interests of the European site as listed in columns to the left	• Tidal currents • Height and frequency of the tides • Water levels • Erosion and deposition rates • Appropriate levels of disturbance • Air quality • Water quality including nutrient levels, water clarity, sediment levels • Appropriate agricultural practices including grazing pressures • Riparian habitat prone to flooding • River habitat • Water quality (Q4-5)
Lough Gash Turlough SAC (00000051)	<u>Annex I habitats:</u> • *Turloughs [3180]	<u>Annex I habitats:</u> • *Turloughs – Inadequate	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: The qualifying interests of the	• Surface and ground water flow • Water levels • Water quality • Appropriate agricultural practices including grazing pressures

			European site as listed in columns to the left	
Moneen Mountain SAC [000054]	Annex I habitats: • *Turloughs [3180] • Alpine and boreal heaths [4060] • *Juniperus communis* formations on heaths or calcareous grasslands [5130] • Calaminarian grasslands of the Violetalia calaminariae [6130] • Semi-natural dry grasslands and scrubland facies on calcareous grasslands [6210] • Petrifying springs with tufa formation (Cratoneurion) [7220] • *Limestone pavements [8240] Annex II Species • Marsh fritillary *Euphydryas aurinia* [1065] • Lesser horseshoe bat *Rhinolophus hipposideros* [1303]	Annex I habitats: • *Turloughs [3180] - Inadequate • Alpine and boreal heaths [4060] - Bad • *Juniperus communis* formations on heaths or calcareous grasslands [5130] - Inadequate • Calaminarian grasslands of the Violetalia calaminariae [6130] - Inadequate • Semi-natural dry grasslands and scrubland facies on calcareous grasslands [6210] – Bad • Petrifying springs with tufa formation (Cratoneurion) [7220] - Inadequate • *Limestone pavements [8240] - Inadequate Annex II Species • Marsh fritillary *Euphydryas aurinia* [1065] - Inadequate • Lesser horseshoe bat *Rhinolophus hipposideros* [1303] - Favourable	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: The qualifying interests of the European site as listed in columns to the left	• Surface and ground water flow • Water levels • Water quality • Appropriate agricultural practices including grazing pressures • Connectivity between sites • Maintenance of foraging habitat • Appropriate levels of disturbance
Galway Bay Complex SAC (000268)	Annex I habitats: • Mudflats and sandflats not covered by seawater at low tide [1140] • *Coastal lagoons [1150]	Annex I habitats: • Mudflats and sandflats not covered by seawater at low tide [1140] - Inadequate • *Coastal lagoons [1150] -	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:	• Tidal currents • Height and frequency of the tides • Water levels • Erosion and deposition rates • Foraging Habitat

	• Large shallow inlets and bays [1160] • Reefs [1170] • Perennial vegetation of stony banks [1220] • *Salicornia* and other annuals colonising mud and sand [1310] • Atlantic salt meadows (Glauco-Puccinetalia maritimae) [1330] • Mediterranean salt meadows (Juncetalia maritime) [1410] • *Turloughs [3180] • *Juniperus communis* formations on heaths or calcareous grasslands [5130] • Semi-natural dry grasslands and scrubland facies on calcareous grasslands (Festuco-Brometalia)(*Important orchid sites) [6210] • Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae [7210] • Alkaline fens [7230] <u>Annex II Species</u> • Otter *Lutra lutra* [1355] • Harbour seal *Phoca vitulina* [1365]	Bad • Large shallow inlets and bays [1160] – Inadequate • Reefs [1170] - Bad • Perennial vegetation of stony banks [1220] – Inadequate • *Salicornia* and other annuals colonising mud and sand [1310] – Inadequate • Atlantic salt meadows (Glauco-Puccinetalia maritimae) [1330] - Inadequate • Mediterranean salt meadows (Juncetalia maritime) [1410] - Inadequate • *Turloughs [3180] – Inadequate • *Juniperus communis* formations on heaths or calcareous grasslands [5130] - Inadequate • Semi-natural dry grasslands and scrtubland facies on calcareous grasslands (Festuco-Brometalia) (*Important orchid sites) [6210] - Bad • Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae [7210] - Bad • Alkaline fens [7230] - Bad <u>Annex II Species</u> • Otter *Lutra lutra* [1355] -	The qualifying interests of the European site as listed in columns to the left Detailed conservation objectives are available for this site, see www.npws.ie	• Food supply • Appropriate levels of disturbance • Air quality • Water quality including nutrient levels, water clarity, sediment levels • Appropriate agricultural practices including grazing pressures • Riparian habitat prone to flooding • River habitat • Water quality (Q4-5) • Unhindered migratory routes

		Favourable • Harbour seal *Phoca vitulina* [1365] - Favourable		
Ballyvaughan Turlough SAC (000996)	Annex I habitats: • *Turloughs [3180]	Annex I habitats: • *Turloughs [3180] – Inadequate	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: The qualifying interests of the European site as listed in columns to the left	• Water levels • Water quality including nutrient levels, water clarity, sediment levels • Appropriate agricultural practices including grazing pressures • Appropriate levels of development in the vicinity.
East Burren Complex SAC (001926)	Annex I habitats: • Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. [3140] • *Turloughs [3180] • Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] • Alpine and Boreal heaths [4060] • *Juniperus communis* formations on heaths or calcareous grasslands [5130] • Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco Brometalia*)(*important orchid sites) [6210] • Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) [6510]	Annex I habitats: • Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. – Unfavourable/Bad • *Turloughs – Unfavourable/Inadequate • Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation - Unfavourable/Inadequate • Alpine and Boreal heaths – Unfavourable/Bad • *Juniperus communis* formations on heaths or calcareous grasslands – Unfavourable/Inadequate • Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco Brometalia*)(*important orchid	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: • The qualifying interests of the European site as listed in columns to the left	• Water quality including nutrient levels, water clarity, sediment levels • Water levels • Calcium rich conditions • Low nutrient waters • Surface and ground water flow • Scrub management • Appropriate levels of disturbance • Appropriate levels of grazing • Maintenance of nursery, transitional and hibernation habitats • Maintenance of foraging habitat • Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality • Appropriate agricultural practices including grazing pressures • Riparian habitat prone to flooding

	• Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] • Petrifying springs with tufa formation (*Cratoneurion*) [7220] • Alkaline fens [7230] • Limestone pavements [8240] • Caves not open to the public [8310] • *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae)* [91E0] <u>Annex II species:</u> • Marsh fritillary *Euphydryas aurinia* [1065] • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303] • Otter *Lutra lutra* [1355]	sites) – Unfavourable/Bad • Lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) – Unfavourable/Bad • Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* – Unfavourable/Bad • Petrifying springs with tufa formation (*Cratoneurion*) – Unfavourable/Inadequate • Alkaline fens – Unfavourable/Bad • Limestone pavements – Unfavourable/Inadequate • Caves not open to the public - Favourable • *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae)* - Unfavourable/Bad <u>Annex II species:</u> • Marsh fritillary *Euphydryas aurinia* – Unfavourable/Inadequate • Lesser Horseshoe Bat *Rhinolophus hipposideros* – Favourable • Otter *Lutra lutra* - Favourable		
Newhall and Edenvale Complex SAC (002091)	<u>Annex I habitats:</u> • Caves not open to the public [8310]	<u>Annex I habitats:</u> • Caves not open to the public - Favourable	To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II	• Appropriate levels of disturbance • Maintenance of breeding, foraging and hibernation habitats

	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303]	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* - Favourable	species for which the SAC has been selected: The qualifying interests of the European site as listed in columns to the left	• Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality • Groundwater levels/movements
Newgrove House SAC (002157)	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303]	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* – Favourable	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: The qualifying interests of the European site as listed in columns to the left	• Appropriate levels of disturbance • Maintenance of hibernation habitats • Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality
Lower River Shannon SAC (002165)	Annex I habitats: • Sandbanks which are slightly covered by sea water all the time [1110] • Estuaries [1130] • Mudflats and sandflats not covered by seawater at low tide [1140] • *Coastal lagoons [1150] • Large shallow inlets and bays [1160] • Reefs [1170] • Perennial vegetation of stony banks [1220] • Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] • *Salicornia* and other annuals colonizing mud and sand [1310]	Annex I habitats: • Sandbanks which are slightly covered by sea water all the time - Favourable • Estuaries – Unfavourable/Inadequate • Mudflats and sandflats not covered by seawater at low tide - Unfavourable/Inadequate • *Coastal lagoons - Unfavourable/Bad • Large shallow inlets and bays - Unfavourable/Inadequate • Reefs - Unfavourable/Bad • Perennial vegetation of stony banks - Unfavourable/Inadequate • Vegetated sea cliffs of the Atlantic and Baltic coasts -	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: The qualifying interests of the European site as listed in columns to the left Detailed conservation objectives are available for this site, see www.npws.ie	• Tidal currents • Height and frequency of the tides • Water levels • Erosion and deposition rates • Foraging Habitat • Food supply • Spawning habitat • Appropriate levels of disturbance • Air quality • Water quality including nutrient levels, water clarity, sediment levels • Appropriate agricultural practices including grazing pressures • Riparian habitat prone to flooding • River habitat • Water quality (Q4-5) • Riverbed breeding gravels • Unhindered migratory routes

	• Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* [1330] • Mediterranean salt meadows *(Juncetalia maritimi)* [1410] • Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260] • *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)* [6410] • *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae)* [91E0] <u>Annex II species:</u> • Freshwater Pearl Mussel *Margaritifera margaritifera* [1029] • Sea Lamprey *Petromyzon marinus* [1095] • Brook Lamprey *Lampetra planeri* [1096] • River Lamprey *Lampetra fluviatilis* [1099] • Atlantic Salmon *Salmo salar* (only in fresh water) [1106] • Bottlenose Dolphin *Tursiops truncates* [1349] • Otter *Lutra lutra* [1355]	Unfavourable/Inadequate • *Salicornia* and other annuals colonizing mud and sand - Unfavourable/Inadequate • Atlantic salt meadows *(Glauco-Puccinellietalia maritimae)* - Unfavourable/Inadequate • Mediterranean salt meadows *(Juncetalia maritimi)* - Unfavourable/Inadequate • Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation - Unfavourable/Inadequate • *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)* - Unfavourable/Bad • *Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae)* - Unfavourable/Bad <u>Annex II species:</u> • Freshwater Pearl Mussel *Margaritifera margaritifera* - Unfavourable/Bad • Sea Lamprey *Petromyzon marinus* - Unfavourable/Bad • Brook Lamprey *Lampetra planeri* - Favourable • River Lamprey *Lampetra fluviatilis* - Favourable		

		• Atlantic Salmon *Salmo salar* (only in fresh water) – Unfavourable/Inadequate • Bottlenose Dolphin *Tursiops truncates* - Favourable • Otter *Lutra lutra* - Favourable		
Old Farm Buildings, Ballymacrogan SAC (002245)	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303]	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* – Favourable	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: The qualifying interests of the European site as listed in columns to the left	• Appropriate levels of disturbance • Maintenance of breeding habitats • Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality
Kilkee Reefs SAC (002264)	Annex I habitats: • Large shallow inlets and bays [1160] • Reefs [1170] • Submerged or partially submerged sea caves [8330]	Annex I habitats: • Large shallow inlets and bays [1160] - Inadequate • Reefs [1170] - Bad • Submerged or partially submerged sea caves [8330] – Favourable	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: The qualifying interests of the European site as listed in columns to the left Detailed conservation objectives are available for this site, see www.npws.ie	• Appropriate levels of development in the vicinity • Erosion and deposition rates • Appropriate levels of disturbance
Ratty River Cave SAC (002316)	Annex I habitats: • Caves not open to the public [8310] Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303]	Annex I habitats: • Caves not open to the public - Favourable Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* - Favourable	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: The qualifying interests of the European site as listed in	• Appropriate levels of disturbance • Maintenance of breeding and hibernation habitats • Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality

			columns to the left	• Groundwater levels/movements
Kilkishen House SAC (002319)	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303]	Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* – Favourable	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: The qualifying interests of the European site as listed in columns to the left	• Appropriate levels of disturbance • Maintenance of summer and winter roosts habitats • Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality
Pouladatig Cave SAC (000037)	Annex I habitats: • Caves not open to the public [8310] Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* [1303]	Annex I habitats: • Caves not open to the public - Favourable Annex II species • Lesser Horseshoe Bat *Rhinolophus hipposideros* - Favourable	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: The qualifying interests of the European site as listed in columns to the left	• Appropriate levels of disturbance • Appropriate levels of development in the vicinity • Appropriate agricultural practices including grazing pressures • Maintenance of hibernation habitats • Maintenance of foraging habitat • Food supply • Appropriate levels of development in the vicinity • Connectivity between sites • Vegetation cover • Air quality • Groundwater levels/movements
Special Protection Areas (SPAs)				
Cliffs of Moher SPA (004005)	• Fulmar *Fulmarus glacialis* [A009] breeding • Kittiwake *Rissa tridactyla* [A188] breeding • Guillemot *Uria aalge* [A199] breeding • Razorbill *Alca torda* [A200] breeding • Puffin *Fratercula arctica* [A204] breeding • Chough *Pyrrhocorax pyrrhocorax* [A346] breeding	• Fulmar *Fulmarus glacialis* [A009] - Green • Kittiwake *Rissa tridactyla* [A188] - Amber • Guillemot *Uria aalge* [A199] - Amber • Razorbill *Alca torda* [A200] - Amber • Puffin *Fratercula arctica* [A204] – Amber • Chough *Pyrrhocorax pyrrhocorax* [A346] - Amber	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: The qualifying interests of the European site as listed in columns to the left	• Food supply • Breeding habitat • Undisturbed roosting sites close to feeding areas • Water quality • Appropriate levels of disturbance

Inner Galway Bay SPA (004031)	• Great northern diver *Gavia immer* [A003] wintering • Cormorant *Phalacrocorax carbo* [A017] wintering + breeding • Grey heron *Ardea cinerea* [A028] • Light-bellied brent goose *Branta bernicla hrota* [A046] wintering • Wigeon *Anas Penelope* [A050] - wintering • Teal *Anas crecca* [A052] wintering • Shoveler *Anas clypeata* [A056] wintering • Red-breasted merganser *Mergus serrator* [A069] wintering • Ringed plover *Charadrius hiaticula* [A137] wintering • Golden plover *Pluvialis apricaria* [A140] wintering • Lapwing *Vanellus vanellus* [A142] wintering • Dunlin *Calidris alpina* [A149] wintering • Bar-tailed godwit *Limosa lapponica* [A157] wintering • Curlew *Numenius arquata* [A160] wintering • Redshank *Tringa tetanus* [A162] wintering • Black-headed gull *Chroicocephalus ridibundus* [A179] wintering	• Great northern diver *Gavia immer* [A003] - Amber • Cormorant *Phalacrocorax carbo* [A017] -Amber • Grey heron *Ardea cinerea* [A028] - Green • Light-bellied brent goose *Branta bernicla hrota* [A046] - Amber • Wigeon *Anas Penelope* [A050] - Red • Teal *Anas crecca* [A052] - Amber • Shoveler *Anas clypeata* [A056] - Red • Red-breasted merganser *Mergus serrator* [A069] – Amber • Ringed plover *Charadrius hiaticula* [A137] - Green • Golden plover *Pluvialis apricaria* [A140] - Red • Lapwing *Vanellus vanellus* [A142] - Red • Dunlin *Calidris alpina* [A149] - Red • Bar-tailed godwit *Limosa lapponica* [A157] - Amber • Curlew *Numenius arquata* [A160] - Red • Redshank *Tringa tetanus* [A162] - Red • Black-headed gull *Chroicocephalus ridibundus* [A179] - Red • Common gull *Larus canus*	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: The qualifying interests of the European site as listed in columns to the left	• Food supply • Breeding habitat • Undisturbed roosting sites close to feeding areas • Water quality • Appropriate levels of disturbance

	• Common gull *Larus canus* [A182] wintering • Sandwich tern *Sterna sandvicensis* [A191] breeding • Common tern *Sterna hirundo* [A193] breeding • Wetland and water birds [A999]	[A182] - Amber • Sandwich tern *Sterna sandvicensis* [A191] - Amber • Common tern *Sterna hirundo* [A193] - Amber • Wetland and water birds [A999]		
Lough Derg (Shannon) SPA (004058)	• Cormorant *Phalacrocorax carbo* [A017] breeding + wintering • Tufted duck *Aythya fuligula* [A061] wintering + breeding • Goldeneye *Bucephala clangula* [A067] wintering + breeding • Common tern *Sterna hirundo* [A193] Breeding • Wetlands and Waterbirds [A999]	• Cormorant *Phalacrocorax carbo* [A017] - Amber • Tufted duck *Aythya fuligula* [A061] - Red • Goldeneye *Bucephala clangula* [A067] - Red • Common tern *Sterna hirundo* [A193] - Amber • Wetlands and Waterbirds [A999]	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The qualifying interests of the European site as listed in columns to the left	• Food supply • Breeding habitat • Undisturbed roosting sites close to feeding areas • Water quality • Appropriate levels of disturbance
River Shannon and River Fergus Estuaries SPA (004077)	• Cormorant *Phalacrocorax carbo* [A017] breeding + wintering • Whooper Swan *Cygnus cygnus* [A038] wintering • Light-bellied Brent Goose *Branta bernicla hrota* [A046] wintering • Shelduck *Tadorna tadorna* [A048} wintering • Wigeon *Anas penelope* [A050] wintering • Teal *Anas crecca* [A052] wintering • Pintail *Anas acuta* [A054] wintering • Shoveler *Anas*	• Cormorant *Phalacrocorax carbo* - Amber • Whooper Swan *Cygnus cygnus* - Amber • Light-bellied Brent Goose *Branta bernicla hrota* - Amber • Shelduck *Tadorna tadorna* - Amber • Wigeon *Anas penelope* - Red • Teal *Anas crecca*- Amber • Pintail *Anas acuta* - Green • Shoveler *Anas clypeata* - Red • Scaup *Aythya marila* - Amber • Ringed Plover *Charadrius hiaticula* - Green • Golden Plover *Pluvialis*	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: The qualifying interests of the European site as listed in columns to the left Detailed conservation objectives are available for this site, see www.npws.ie	• Food supply • Breeding habitat • Undisturbed roosting sites close to feeding areas • Flooding regime of coastal grasslands • Water quality • Appropriate levels of disturbance

	clypeata [A056] wintering • Scaup *Aythya marila* [A062] wintering • Ringed Plover *Charadrius hiaticula* [A137] wintering • Golden Plover *Pluvialis apricaria* [A140] wintering • Grey Plover *Pluvialis squatarola* [A141] wintering • Lapwing *Vanellus vanellus* [A142] wintering • Knot *Calidris canutus* [A143] wintering • Dunlin *Calidris alpina* [A149] wintering • Black-tailed Godwit *Limosa limosa* [A156] wintering • Bar-tailed Godwit *Limosa lapponica* [A157] wintering • Curlew *Numenius arquata* [A160] wintering • Redshank *Tringa totanus* [A162] wintering • Greenshank *Tringa nebularia* [A164] wintering • Black-headed Gull *Chroicocephalus ridibundus* [A179] wintering • Wetlands [A999]	*apricaria* - Red • Grey Plover *Pluvialis squatarola* - Amber • Lapwing *Vanellus vanellus* - Red • Knot *Calidris canutus* - Amber • Dunlin *Calidris alpina* - Red • Black-tailed Godwit *Limosa limosa*- Amber • Bar-tailed Godwit *Limosa lapponica* - Amber • Curlew *Numenius arquata* - Red • Redshank *Tringa totanus* - Red • Greenshank *Tringa nebularia* - Green • Black-headed Gull *Chroicocephalus ridibundus* - Red		
Mid-Clare Coast SPA (004182)	• Cormorant *Phalacrocorax carbo* [A017] breeding • Barnacle goose *Branta leucopsis* [A045] wintering • Ringed plover *Charadrius hiaticula* [A137] wintering • Sanderling *Calidris alba*	• Cormorant *Phalacrocorax carbo* - Amber • Barnacle goose *Branta leucpsis* [A045] - Amber • Ringed plover *Charadrius hiaticula* [A137] - Green • Sanderling *Calidris alba*	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The qualifying interests of the European site as listed in	• Food supply • Undisturbed roosting sites close to feeding areas • Water quality • Appropriate levels of disturbance

	[A144] wintering • Purple sandpiper *Calidris maritima* [A148] wintering • Dunlin *Calidris alpina* [A149] wintering • Turnstone *Arenaria interpres* [A169] turnstone • Wetlands and Waterbirds [A999]	[A144] - Sanderling • Purple sandpiper *Calidris maritima* [A148] - Green • Dunlin *Calidris alpina* [A149] - Red • Turnstone *Arenaria interpres* [A169] - Green • Wetlands and Waterbirds [A999]	columns to the left	
Corofin Wetlands SPA (004220)	• Little Grebe *Tachybaptus ruficollis* [A004] wintering • Whooper Swan *Cygnus cygnus* [A038] wintering • Wigeon *Anas penelope* [A050] wintering • Teal *Anas crecca* [A052] wintering • Black-tailed Godwit *Limosa limosa* [A156] wintering • Wetlands and Waterbirds [A999]	• Little Grebe *Tachybaptus ruficollis* – Amber • Whooper Swan *Cygnus Cygnus* – Amber • Wigeon *Anas Penelope* – Red • Teal *Anas crecca* – Amber • Black-tailed Godwit *Limosa limosa* - Amber	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: The qualifying interests of the European site as listed in columns to the left	• Food supply • Undisturbed roosting sites close to feeding areas • Water quality • Appropriate levels of disturbance

APPENDIX 2: ASSESSMENT TABLE OF LANDS ZONED ENTERPRISE IN CLARE CDP 2017-2023

European Sites	Enterprise Zone	Habitat Loss & Fragmentation	Habitat Degradation	Habitat Degradation	Habitat Degradation	Disturbance/Displacement
			Surface Water	Groundwater	Invasive Species	Qualifying Species
Danes Hole, Poulnalecka SAC (000030)	O'Callaghan's Mills	No. This enterprise zone is located at a remote distance from this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	No. No groundwater pathways link this Enterprise Site to this SAC and the qualifying feature of interest of this SAC are not influence by groundwater.	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.
Black Head Poulsallagh Complex SAC (000020)	Lisdoonvarna ENT1	No. This enterprise zone is located at a remote distance from this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No	No. No mobile species are listed as qualifying features of interest for this SAC. Petalwort is the only Annex II qualifying species of this SAC. This is a sedentary species and is located at a remote distance from this enterprise site.

	Lisdoonvarna ENT2	No. This enterprise zone is located at a remote distance from this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No	No. No mobile species are listed as qualifying features of interest for this SAC. Petalwort is the only Annex II qualifying species of this SAC. This is a sedentary species and is located at a remote distance from this enterprise site.
	Lisdoonvarna ENT3	No. This enterprise zone is located at a remote distance from this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No	No. No mobile species are listed as qualifying features of interest for this SAC. Petalwort is the only Annex II qualifying species of this SAC. This is a sedentary species and is located at a remote distance from this enterprise site.

Dromore Woods and Loughs SAC (000032)	Ruan	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The site is located wihtin the catchment of Dromore Lough.	No. This enterprise site is not connected to this SAC via groundwater pathways .	No.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.
Inagh River Estuary SAC (000036)	Liscannor	No. This enterprise zone is located at a remote distance from this European Site.	This site is located adjacent to Liscannor Stream, which flows into Liscannor Bay, which is located approximately 1km from the Inagh River Estuary SAC. Discharges to the coast from this site could, in theory, result in adverse effects to this SAC.	No. This enterprise site is not connected to this SAC via groundwater pathways .	No.	No. No Annex II species are listed as qualifying features of interest for this SAC.

Lough Gash Turlough SAC (00051)	Newmarket-on-Fergus	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The site is located adjacent to the Boheraroan Stream which drains into Lough Gash Turlough a short distance downstream from the site. The discharge of inadequately treated waters from the site to the Lower River Shannon SAC will have the potential to adversely effect the status of these European Sites.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No.	No. No Annex II species are listed as qualifying features of interest for this SAC.
Moneen Mountain SAC [000054]	Ballyvaughan	No. This enterprise zone is located at a remote distance from this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	no.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.

	Belharbour	No. This enterprise zone is located outside the boundary of this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.
Galway Bay Complex SAC (000268)	Ballyvaughan	No. This enterprise zone is located at a remote distance from this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No.	No. There are no links between the enterprise site and watercourses of the SAC that support otters, a qualifying species of this SAC.

	Belharbour	No. This enterprise zone is located outside the boundary of this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No.	No. There are no links between the enterprise site and watercourses of the SAC that support otters, a qualifying species of this SAC.
Ballyvaughan Turlough SAC (000996)	Ballyvaughan	No. This enterprise zone is located at a remote distance from this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No.	No. No Annex II species are listed as qualifying features of interest for this SAC.

East Burren Complex SAC (001926)	Belharbour	No. This enterprise zone is located outside the boundary of this European Site.	No. No surface water pathways link this enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No.	No. There are no links between the enterprise site and watercourses of the SAC that support otters, a qualifying species of this SAC.

	Corofin	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The enterprise zone is located is located a short distance to the south of the River Fergus, which forms part of the SAC and drains to the Lough Atodaun which also forms part of the SAC and supports the qualfying habitat of hard to oligo-mesotrophic waters. The discharge of inadequately treated waters from the site to the River Fergus and Lough Atodaun will have the potential to adversely effect freshwater qualifying habitats and freshwater species of this SAC.	The enterprise is located in a karst area and there are likely to be groundwater connections to this SAC. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of these European Sites	No.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential. Otters are a qs of this SAC and any adverse effects to the water quality of the River Fergus and Lough Atodaun downstream of the enterprise site will have the potential to result in adverse effects to otters.

Newhall and Edenvale Complex SAC (002091)	Ennis ENT1	No. This enterprise zone is located at a remote distance from this European Site.	No. This enterprise site is not connected to this SAC and the qualifying features of interest of this SAC are not reliant on freshwater habitats.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.
Newgrove House SAC (002157)	Tulla ENT2	No. This enterprise zone is located at a remote distance from this European Site.	No. This enterprise site is not connected to this SAC and the qualifying features of interest of this SAC are not reliant on freshwater habitats.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.

	Tulla ENT1	No. This enterprise zone is located at a remote distance from this European Site.	No. This enterprise site is not connected to this SAC and the qualifying features of interest of this SAC are not reliant on freshwater habitats.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.
Lower River Shannon SAC (002165)	Ennis: ENT2	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The site is located within the Fergus catchment area and the discharge of inadequately treated waters from the site to the Fergus catchment will have the potential to adverselyy effect its qualifying freshwater habitats and species.	Yes. There are karst features located to the west of this enterprise zone and there is potential for groundwater links between this enterprise site and this SAC. The discharge of inadequately treated waters from the site, via groundwater pathways to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Ennis ENT1	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The site is located within the Fergus catchment area and the discharge of inadequately treated waters from the site to the Fergus catchment will have the potential to adversely effect the status of these European Sites. The discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	Yes. There are karst features located to the west of this enterprise zone and there is potential for groundwater links between this enterprise site and this SAC. The discharge of inadequately treated waters from the site, via groundwater pathways to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Kilkishen	No. This enterprise zone is located at a remote distance from this European Site.	The site is located directly north of Kilkishen River, which flows into the Derrymore river, then the Owenogarney river and ultimately the River Shannon. The discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Killaloe	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Lower River Shannon SAC catchment area and the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Tulla ENT2	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Lower River Shannon SAC catchment, with the Rine River sub-catchment establishing a link between the site and this SAC. The discharge of inadequately treated waters from the site to the Lower River Shannon SAC will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Tulla ENT1	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Lower River Shannon SAC catchment, with the Rine River sub-catchment establishing a link between the site and this SAC. The discharge of inadequately treated waters from the site to the Lower River Shannon SAC will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Sixmilebridge	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Ratty River catchment. This river drains to the Lower River Shanon SAC and the discharge of inadequately treated waters from the site to the Ratty River catchment and on to the Lower River Shanon SAC will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Ballynacally	No. This enterprise zone is located outside the boundary of this European Site.	This is located adjacent to the Ballymacally Creek, the lower reaches of which are designated as part of the Lower River Shannon SAC. The discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Shannon	No. This enterprise zone is located outside the boundary of this European Site.	The site is located within the Shannon estuary catchment and the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Carrigaholt	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Cranny ENT1	No. This enterprise zone is located outside the boundary of this SAC.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Cranny ENT2	Yes. This enterprise site overlaps the boundary of this SAC. The development of enterprise facilities within this SAC could result in the loss of or degradation to Annex 1 qualifying habitats of the SAC should they occur within or immediately to the footprint of the development footprint.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Killadysert	No. This enterprise zone is located at a remote distance from this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Killimer	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Kilrush ENT1	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Kilrush ENT5	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Kilrush ENT2	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Kilrush ENT6	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Kilrush ENT3	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Kilrush ENT4	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Kilrush ENT7	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.

	Labasheeda ENT1	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
	Labasheeda ENT2	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the Lower River Shannon SAC nd the discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect its qualifying freshwater habitats species.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SAC will have the potential to adversely effect otters and freshwater aquatic species of this SAC known to occur downstream of the enterprise site.
Old Farm Buildings, Ballymacrogan SAC (002245)	Ruan	No. This enterprise zone is located at a remote distance from this European Site.	No. This enterprise site is not connected to this SAC and the qualifying features of interest of this SAC are not reliant on freshwater habitats.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.

Kilkee Reefs SAC (002264)	Kilkee ENT3	No. This enterprise zone is located at a remote distance from this European Site.	An un-named stream is located to the north of this site and this stream drains to the Kilkee Reefs SAC. The discharge of inadequately treated waters from the site to this SAC, via the un-named stream, will have the potential to adversely effect the qualifying coastal and marine habitats of this SAC.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.
	Kilkee ENT1	No. This enterprise zone is located at a remote distance from this European Site.	An un-named stream is located to the north of this site and this stream drains to the Kilkee Reefs SAC. The discharge of inadequately treated waters from the site to this SAC, via the un-named stream, will have the potential to adversely effect the qualifying coastal and marine habitats of this SAC.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.

	Kilkee ENT2	No. This enterprise zone is located at a remote distance from this European Site.	An un-named stream is located to the north of this site and this stream drains to the Kilkee Reefs SAC. The discharge of inadequately treated waters from the site to this SAC, via the un-named stream, will have the potential to adversely effect the qualifying coastal and marine habitats of this SAC.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	No. No Annex II species are listed as qualifying features of interest for this SAC.
Ratty River Cave SAC (002316)	Sixmilebridge	No. This enterprise zone is located at a remote distance from this European Site.	No. This enterprise site is not connected to this SAC and the qualifying features of interest of this SAC are not reliant on freshwater habitats.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.

Kilkishen House SAC (002319)	Kilkishen	No. This enterprise zone is located at a remote distance from this European Site.	No. This enterprise site is not connected to this SAC and the qualifying features of interest of this SAC are not reliant on freshwater habitats.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.
Pouladatig Cave SAC (000037)	Ennis: ENT2	No. This enterprise zone is located at a remote distance from this European Site.	No. This enterprise site is not connected to this SAC and the qualifying features of interest of this SAC are not reliant on freshwater habitats.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Lesser horseshoe bats are a qualifying feature of interest of this SAC. Should lesser horseshoe bats rely on woodland habitats occurring within this enterprise site, then any loss of these habitats as a result of future development will have the potential to result in disturbance to the habitat upon which this species relies.

Cliffs of Moher SPA (004005)	Lisdoonvarna ENT1	No. This enterprise zone is located at a remote distance from this European Site.	Yes. Potential for impacts on water quality as a result of inadequate wastewater treatment and discharge with downstream impacts to water quality surrounding the Cliffs of Moher SPA located in Shannon Plume.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Adverse impacts to coastal water quality could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.
	Lisdoonvarna ENT2	No. This enterprise zone is located at a remote distance from this European Site.	Yes. Potential for impacts on water quality as a result of inadequate wastewater treatment and discharge with downstream impacts to water quality surrounding the Cliffs of Moher SPA located in Shannon Plume.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Adverse impacts to coastal water quality could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.
	Lisdoonvarna ENT3	No. This enterprise zone is located at a remote distance from this European Site.	Yes. Potential for impacts on water quality as a result of inadequate wastewater treatment and discharge with downstream impacts to water quality surrounding the Cliffs of Moher SPA located in Shannon Plume.	No. This enterprise site is not connected to this SAC via groundwater pathways and the qualifying features of interest of this SAC are not not influenced by groundwater	No. There are no pathways between the enterprise site and this SAC that could result in the spread of invasive species from the site to the SAC.	Yes. Adverse impacts to coastal water quality could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.

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Inner Galway Bay SPA (004031)	Belharbour	No. This enterprise zone is located outside the boundary of this European Site.	No. No surface water pathways connect this Enterprise zone to this SAC.	Yes. The site is located within a karst area with likely groundwater connections to this European Site. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of this European Site.	No.	Yes. Adverse impacts to coastal water quality could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.
Lough Derg (Shannon) SPA (004058)	Mountshannon	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Lough Derg SPA catchment area and the discharge of inadequately treated waters from the site to Lough Derg will have the potential to adversely effect the status of wetland habitats supported by this SPA.	No. This enterprise site is not connected to this SPA via groundwater pathways to this enterprise site.	No	Yes. Adverse impacts to water quality wihtin Lough Derg could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.

	Scarrif Tuamgraney, ENT1	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Lough Derg SPA catchment area and the discharge of inadequately treated waters from the site to Lough Derg will have the potential to adversely effect the status of wetland habitats supported by this SPA.	No. This enterprise site is not connected to this SPA via groundwater pathways to this enterprise site.	No	Yes. Adverse impacts to water quality wihtin Lough Derg could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.
	Scarrif Tuamgraney, ENT2	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Lough Derg SPA catchment area and the discharge of inadequately treated waters from the site to Lough Derg will have the potential to adversely effect the status of wetland habitats supported by this SPA.	No. This enterprise site is not connected to this SPA via groundwater pathways to this enterprise site.	No	Yes. Adverse impacts to water quality wihtin Lough Derg could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.
	Scarrif Tuamgraney, ENT3	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Lough Derg SPA catchment area and the discharge of inadequately treated waters from the site to Lough Derg will have the potential to adversely effect the status of wetland habitats supported by this SPA.	No. This enterprise site is not connected to this SPA via groundwater pathways to this enterprise site.	No	Yes. Adverse impacts to water quality wihtin Lough Derg could result in a deterioration of foraging habitat for special conservation interes seabird species of the SPA.

River Shannon and River Fergus Estuaries SPA (004077)	Ennis: ENT2	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The site is located within the Fergus catchment area and the discharge of inadequately treated waters from the site to the Fergus catchment will have the potential to adversely effect the status of wetland habitats supported by this SPA.	Yes. There are karst features located to the west of this enterprise zone and there is potential for groundwater links between this enterprise site and this SPA. The discharge of inadequately treated waters from the site, via groundwater pathways to the SPA will have the potential to adversely effect the wetland habitats of this SPA.	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Ennis ENT1	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The site is located within the Fergus catchment area and the discharge of inadequately treated waters from the site to the Fergus catchment will have the potential to adversely effect the status of wetland habitats supported by this SPA.	Yes. There are karst features located to the west of this enterprise zone and there is potential for groundwater links between this enterprise site and this SPA. The discharge of inadequately treated waters from the site, via groundwater pathways to the SPA will have the potential to adversely effect the wetland habitats of this SPA.	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Kilkishen	No. This enterprise zone is located at a remote distance from this European Site.	The site is located directly north of Kilkishen River, which flows into the Derrymore river, then the Owenogarney river and ultimately the River Shannon. The discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Killaloe	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the River Shannon and River Fergus Estuaries SPA catchment area and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Tulla ENT2	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the catchment of theRiver Shannon and River Fergus Estuaries SPA, with the Rine River sub-catchment establishing a link between the site and this SPA. The discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Tulla ENT1	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the catchment of theRiver Shannon and River Fergus Estuaries SPA, with the Rine River sub-catchment establishing a link between the site and this SPA. The discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Sixmilebridge	No. This enterprise zone is located at a remote distance from this European Site.	The site is located within the Ratty River catchment. This river drains to the SPA and the discharge of inadequately treated waters from the site to the Ratty River catchment and on to the SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Ballynacally	No. This enterprise zone is located outside the boundary of this European Site.	This is located adjacent to the Ballymacally Creek, which discahrges to the SPA. The discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Shannon	No. This enterprise zone is located outside the boundary of this European Site.	The site is located within the Shannon estuary catchment and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Carrigaholt	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to theSPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Cranny ENT1	No. This enterprise zone is located at a remote distance from this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Cranny ENT2	No. This enterprise zone is located at a remote distance from this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Killadysert	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Killimer	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Kilrush ENT1	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Kilrush ENT5	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Kilrush ENT2	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Kilrush ENT6	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Kilrush ENT3	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

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	Kilrush ENT4	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Kilrush ENT7	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Labasheeda ENT1	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Labasheeda ENT2	No. This enterprise zone is located outside the boundary of this European Site.	The site is located adjacent to the SPA and the discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect the wetland habitats supported by it.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
Mid-Clare Coast SPA (004182)	Cooraclare	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within the Doonbeg River catchment. The Doonbeg River drains to the Mid-Clare Coast SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Creegh ENT1	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within the Creegh River catchment. The Creegh River drains to the Mid-Clare Coast SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Creegh ENT2	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within the Creegh River catchment. The Creegh River drains to the Mid-Clare Coast SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Doonbeg ENT1	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within the Doonbeg River catchment. The Doonbeg River drains to the Mid-Clare Coast SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Doonbeg ENT2	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within the Doonbeg River catchment. The Doonbeg River drains to the Mid-Clare Coast SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Kilmihil ENT1	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within the Doonbeg River catchment. The Doonbeg River drains to the Mid-Clare Coast SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Kilmihil ENT2	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within the Doonbeg River catchment. The Doonbeg River drains to the Mid-Clare Coast SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Miltown Malbey ENT1	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within surface water catchments that eventually drain to this SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

	Miltown Malbey ENT2	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within surface water catchments that eventually drain to this SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.
	Miltown Malbey ENT2	No. This enterprise zone is located at a remote distance from this European Site.	This site is located within surface water catchments that eventually drain to this SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	No. This enterprise site is not connected to this SPA via groundwater pathways and the special conservation interests of this SPA are not not influenced by groundwater	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

Corofin Wetlands SPA (004220)	Corofin	No. This enterprise zone is located at a remote distance from this European Site.	Yes. The enterprise zone is located is located a short distance to the south of the River Fergus, which forms part of the SPA and drains to the Lough Atodaun which also forms part of the SPA and supports wetland habitats of the SPA. The discharge of inadequately treated waters from the site to this SPA will have the potential to adversely effect the status of this European Site.	The enterprise is located in a karst area and there are likely to be groundwater connections to this SPA. The discharge of inadequately treated waters from the site to ground will have the potential to adversely effect the status of wetland habitats supported by this SPA.	No.	Yes. This discharge of inadequately treated waters from the site to the SPA will have the potential to adversely effect special conservation interest bird species of the SPA.

APPENDIX 3: ENVIRONMENTAL PROTECTION MEASURES OUTLINED IN THE CLARE COUNTY DEVELOPMENT PLAN

Table 1: Principal Environmental Protective Measures in the Clare CDP 2017-2023:

Development Plan Objective: Appropriate Assessment, Strategic Environmental Assessment and Strategic Flood Risk Assessment	
CDP2.1	It is an objective of the development plan: a) To require the preparation and assessment of all planning applications in the plan area to have regard to the information, data and requirements of the Natura Impact Report, SEA Environmental Report and Strategic Flood Risk Assessment Report contained in Volume 10 of this development plan; b) To require projects to be fully informed by ecological and environmental constraints at the earliest stage of project planning and any necessary assessment to be undertaken, including assessments of disturbance to species, where required; c) To require compliance with the objectives and requirements of the Habitats Directive, the Bird Directive, Water Framework Directive, all other relevant EU Directives and all relevant transposing legislation.
Development Plan Objective: Environmental Impact Assessment	
CDP14.9	It is an objective of Clare County Council: a) To implement the EIA Directive, ensuring that all elements/stages or components of the project are included in one overall assessment and all reasonable alternatives are taken into consideration in choosing the option with the least environmental impact. b) To have regard to 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessments (2013)' when considering proposals for which an EIA is required; c) To ensure full compliance with the requirements of the EU Habitats Directive, SEA Directive and associated legislation/regulations, including the associated European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), European Communities (Environmental Assessment of Certain Plans and Programmes) regulations 2004-2011, and the European Communities (Environmental Impact Assessment) Regulations 1989–2011 (or any updated/superseding legislation).

Development Plan Objective: European Sites	
CDP14.2	It is an objective of the development plan: a) To afford the highest level of protection to all designated European sites in accordance with the relevant Directives and legislation on such matters; b) To require all planning applications for development that may have (or cannot rule out) likely significant effects on European sites in view of the site's Conservation Objectives, either in isolation or in combination with other plans or projects, to submit a Natura Impact Statement in accordance with the requirements of the EU Habitats Directive and the Planning and Development Act, 2000 (as amended); c) To recognise and afford appropriate protection to any new or modified SPAs or SACs that are identified during the lifetime of this plan, having regard to the fact that proposals for development outside of a European site may also have an indirect effect.
Development Plan Objective: Requirement for Appropriate Assessment under the Habitats Directive	
CDP14.3	It is an objective of the development plan: a) To implement Article 6(3) and where necessary Article 6(4) of the Habitats Directive and to ensure that Appropriate Assessment is carried out in relation to works, plans and projects likely to impact on European sites (SACs and SPAs), whether directly or indirectly or in combination with any other plan(s) or project(s). All assessments must be in compliance with the European Communities (Birds and Natural Habitats) Regulations 2011; b) To have regard to 'Appropriate Assessment of Plans and Projects in Ireland – Guidelines for Planning Authorities 2009' or any updated version.
Development Plan Objective: Non-Designated Sites	
CDP14.7	It is an objective of Clare County Council: a) To ensure the protection and conservation of areas, sites, species and ecological networks/ corridors of biodiversity value outside of designated sites throughout the county and to require an ecological assessment to accompany development proposals likely to impact on such areas or species; b) To ensure that available habitat mapping is taken into consideration in any ecological assessment undertaken;

	c) To complete the Habitat Mapping of the county (in accordance with A Guide to Habitats in Ireland – The Heritage Council 2000) in order to identify and record the natural habitats of the county at a detailed level and afford appropriate protection to areas of importance, as required.
Development Plan Objective: Natural Heritage and Infrastructure Schemes	
CDP14.8	It is an objective of the development plan: To ensure the protection of natural heritage when considering proposed services, infrastructure and roadworks (both realignments and new roads) located in close proximity to, or nearby, protected ecological sites or sites of importance in terms of biodiversity.
Development Plan Objective: Habitat Protection	
CDP14.11	It is an objective of the development plan: a) To protect and promote the sustainable management of the natural heritage, flora and fauna of the county through the promotion of biodiversity, the conservation of natural habitats and the enhancement of new and existing habitats; b) To promote the conservation of biodiversity through the protection of sites of biodiversity importance and wildlife corridors, both within and between the designated sites and the wider plan area; c) To ensure that there is no net loss of potential Lesser Horseshoe Bat feeding habitats, treelines and hedgerows within 3km of known roosts.
Development Plan Objective: Habitat Fragmentation	
CDP14.13	It is an objective of the development plan: To ensure that development proposals support and enhance the connectivity and integrity of habitats in the plan area by incorporating natural features into the design of development proposals.
Development Plan Objective: Inland Waterways and River Corridors	
CDP14.14	It is an objective of the development plan: a) To work with all relevant stakeholders to protect and manage inland waters, river corridors and their floodplains, turloughs, lakes, fens and other water bodies from degradation and damage, and to recognise and promote them as natural assets and key elements in the green infrastructure network in the county;

	b) To protect riparian zones / areas, where appropriate, in the plan area. c) To ensure that, where development occurs within a riparian zone, it does not have a negative impact on associated habitats and species; d) To work with all relevant stakeholders to protect and improve appropriate access to waterways and river corridors whilst ensuring their conservation and the protection of the resource and water quality; e) To have regard to the 'Clare County Wetlands Survey 2008' and other relevant documentation, including the 'Convention on Wetlands of International Importance' (Ramsar Convention), 1971 (ratified, 1984) and the 'EU Communication – Wise Use and Conservation of Wetlands 1995', in the assessment of developments; f) To encourage developments to : • Maintain an appropriate width for the riparian zone to be protected; • Improve appropriate access and compatible leisure activities; • Maintain and enhance the fishing potential for both local interests and tourism by protecting the natural spawning beds of trout and salmon; g) To protect the county's valuable inland fishery resource and support its sustainable development through the protection of water quality and facilitation of ancillary infrastructure at appropriate locations.
Development Plan Objective: Woodland Trees and hedgerows	
CDP14.17	It is an objective of the development plan: a) To preserve and conserve individual or groups of trees identified in Volume 2 of this plan as 'Trees for Preservation' which will enhance the character and appearance of an area; b) To carry out tree survey work during the lifetime of this plan to identify future trees of importance in the county and facilitate their future protection; c) To protect individual or groups of trees within the plan area which are important for environmental, recreational, historical, biodiversity and/or aesthetic reasons or by reason of contribution to sense of place, including groups of trees which correspond with protected habitats, or which support protected species, under the Habitats Directive; d) To work with landowners, local communities and other relevant groups to promote the retention and conservation of existing trees and hedgerows and encourage development proposals that enhance the landscape

	through positive management and additional planting/sensitive replanting of native tree species; e) To protect woodlands and hedgerows from damage and/or degradation and to prevent disruption of the connectivity of woodlands and hedgerows of the county; f) To ensure, where required, applications for development include proposals for planting / leave a suitable ecological buffer zone, between the development works and areas/features of ecological importance; g) Where hedgerows are required to be removed in the interests of traffic safety or where breaches to hedgerows occur due to river drainage/maintenance works and flood repair, to require the applicant/developer to replace reinstate the hedgerows with a suitable replacement of native species to the satisfaction of the Council; h) To require each large green space in new residential developments to have at least one native oak tree, or other naturalised tree species of similar stature and lifespan, integrated into the agreed planting/landscaping scheme; i) To require, where possible, that all trees felled as a result of development proposals be replaced at a minimum ratio of 10 new native species per 1 tree felled.
Development Plan Objective: Wetlands	
CDP14.19	It is an objective of the development plan: To manage, enhance and protect the wetlands in County Clare having regard to the 'County Clare Wetlands Survey (2008)', the 'Planning and Development Regulations 2001 (as amended)' and 'Drainage and Reclamation of Wetlands – Draft Guidelines for Planning Authorities, 2011' and any subsequent guidance documents
Development Plan Objective: Alien and Invasive Species	
CDP14.26	It is an objective of the development plan: a) To raise awareness of the threat of alien invasive species and take all necessary steps to prevent the spread of non-native invasive species and noxious weeds in the plan area, including requiring landowners, developers and boat operators to adhere to best practice guidance in relation to their control; b) To require all development proposals to address the presence or absence of invasive alien species on the proposed development site and to require the preparation of an Invasive Species Management Plan where such species are present; c) To implement the requirements of EU Regulations 1143/2014 on the Prevention and Management of the

	Introduction and Spread of Invasive Alien Species.
Development Plan Objective: Moneypoint Power Station	
CDP6.10	It is an objective of Clare County Council: To facilitate the diversification and expansion of Moneypoint Power Station and to work with all relevant stakeholders to identify and secure an alternative future use for the Strategic Development Location, that complement and are compatible with the existing energy use, in accordance with the findings and recommendations in the SIFP in order to ensure on-going employment and support economic growth in the West Clare area.
Development Plan Objective: Waste Management	
CDP8.28	It is an objective of Clare County Council: a) To implement the provisions of Southern Region Waste Management Plan 2015-2021; b) To encourage and facilitate the development of new alternatives and technological advances in relation to waste management; c) To support the development of waste recycling facilities at appropriate locations in County Clare as a means of facilitating a reduction in the quantity of waste that goes to landfill disposal sites; d) To promote environmental awareness measures and action programmes to ensure good environmental awareness and practices, the recycling of waste, water management, energy conservation

Development Plan Objective	
CDP 8.21	It is an objective of Clare County Council: a) To facilitate the implementation of the Shannon River Basin Management Plan and the Western River Basin Management Plan (together with any subsequent National River Basin Management Plan) for groundwaters and surface waters in the plan area as part of the implementation of the EU Water Framework Directive; b) To protect groundwater resources in accordance with the statutory requirements and specific measures as set out in the relevant River Basin Management Plan; c) To consider proposals for development where it can be clearly demonstrated that the development will meet the requirements of the relevant River Basin Management Plan.

Development Plan Objective: Protection of Water Resources	
CDP8.22	It is an objective of the development plan: a) To protect the water resources of County Clare having regard to the requirements of the relevant EU Directives; b) To ensure that developments that would have an unacceptable impact on water resources, including surface water and groundwater quality and quantity, designated sources protection areas, coastal and transitional waters, river corridors and associated wetlands are not permitted; c) In areas of potable groundwater resources or over vulnerable aquifer areas, development proposals will only be considered if the applicant can clearly demonstrate that the proposed development will not pose a risk to the quality of the underlying groundwater; d) To protect groundwater resources, in accordance with statutory requirements and specific measures as set out in the Shannon and Western River Basin Management Plans; e) To ensure that proposals for development which infringe on a river boundary, or an associated habitat, including their connection by groundwater, will only be considered where it can be clearly demonstrated that: • The character of the area will be conserved; • An acceptable physical riparian zone will be maintained with all natural vegetation preserved; • There will be no impact on the ecological, aquatic or fishing potential of the waters or associated waters; • All proposals are in compliance with the requirements of the Habitats Directive, where appropriate.
Development Plan Objective: Strategic Flood Risk Assessment	
CDP 18.6	It is an objective of Clare County Council: To ensure that proposals for development in areas where there is a risk of flooding, (based on the Flood Risk Maps contained in Volume 2 of the Clare CDP 2017-2023, or any updated version), shall have regard to 'The Planning System and Flood Risk Management (and Technical Appendices) – Guidelines for Planning Authorities 2009' and any future OPW flood assessment information. Such proposals must also demonstrate that appropriate mitigation measures can be put in place.

Development Plan Objective: CFRAMS	
CDP 18.7	It is an objective of Clare County Council: a) To comply with the EU Floods Directive 2007/60/EC; b) To have regard to the requirements and outcomes of the Catchment Flood Risk Assessment and Management Studies (CFRAMS) prepared for the Areas for Further Assessment in County Clare (once finalised) in the assessment of development proposals
Development Plan Objective: Storm Water Management	
CDP 18.8	It is an objective of the development plan: a) To ensure that adequate storm water infrastructure is in place to accommodate the planned level of growth in the plan area; b) To require all new developments to provide a separate foul and surface water drainage system; c) To ensure the implementation of Sustainable Urban Drainage Systems (SuDS) and in particular, to ensure that all storm water generated in a new development is disposed of on-site or is attenuated and treated prior to discharge to an approved storm water system; d) To request the submission of details regarding Surface Water Attenuation Systems for multi-unit development applications in the plan area. Development will only be permitted in areas where sufficient surface water capacity exists.

Development Plan Objective: Compliance with Zoning	
CDP 19.3	It is an objective of the development plan: To require development proposals to comply with the zoning of the subject site in the settlement plans and local area plans.
Development Plan Objective: Water Services	
CDP8.24	It is an objective of the development plan: a) To work closely with Irish Water to identify and facilitate the timely delivery of the water services required to realise the development objectives of this plan;

	b) To facilitate the provision of integrated and sustainable water services through effective consultation with Irish Water on the layout and design of water services in relation to the selection and planning of development areas and the preparation of master plans; c) To ensure that adequate water services will be available to service development prior to the granting of planning permission and to require developers to consult Irish Water regarding available capacity prior to applying for planning permission; d) To ensure that development proposals comply with the standards and requirements of Irish Water in relation to water and waste water infrastructure to facilitate the proposed development.
Development Plan Objective: Water Supply	
CDP8.25	It is an objective of Clare County Council: a) To advocate the provision, by Irish Water, of adequate water supply to accommodate the target population and employment potential of the county in accordance with the statutory obligations set out in EU and national policy and in line with the Core Strategy and Settlement Hierarchy set out in this plan; b) To advocate for the on-going upgrade of water supply Public Main infrastructure in the county; c) To maximise the use of existing capacity in water service in the planning of new development; d) To protect existing wayleaves and protection areas around public water services infrastructure through appropriate zoning and to facilitate the provision of appropriate sites for required water services infrastructure as required; e) To work with all stakeholders to promote water conservation and sustainable water usage; f) To promote and support the use of rainwater harvesting (in new buildings and as a retrofit) where viable; g) To prohibit the use of bored wells for water supply in areas where public supply is available.
Development Plan Objective: Wastewater Treatment and disposal	
CDP8.27	It is an objective of Clare County Council: a) To advocate the provision, by Irish Water, of adequate waste water services and capacity to accommodate the target population and employment potential of County Clare in accordance with the statutory obligations set out in EU and

	b) To support Irish Water in the promotion of effective management of trade discharges to sewers in order to maximise the capacity of the existing sewer networks and minimise detrimental impacts on sewage treatment works; c) To permit the development of single dwelling houses only where it is demonstrated to the satisfaction of the Planning Authority that the proposed wastewater treatment system is in accordance with the Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses EPA (2009); d) To permit the development of treatment systems for small businesses/community facilities in unserviced areas where they are in single ownership and where it is demonstrated to the satisfaction of the Planning Authority that the proposed wastewater treatment system is in accordance with Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses EPA (2009) and Wastewater Treatment Manuals Treatment Systems for Small Communities, Business, Leisure Centres and Hotels, EPA (1999); e) To encourage and support a changeover from septic tanks/private waste water treatment plants to public collection networks wherever feasible, subject to connection agreements with Irish Water and to ensure that any future development connects to the public wastewater infrastructure where it is available.
Development Plan Objective: Smarter Travel	
CDP 8.10	It is an objective of Clare County Council: To support sustainable travel in County Clare and to implement the key goals, targets and actions as contained in 'SmarterTravel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009-2020'
Development Plan Objective: Construction and Demolition Waste	
CDP8.31	It is an objective of Clare County Council: a) To require a C&D Waste Management Plan to be prepared by the developer having regard to the DoEHLG's publication Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects for new construction or demolition projects and to require that the maximum amount of waste material generated on site is reused and recycled; b) To promote the production and reuse of aggregates from C&D waste and their use in construction projects in the region;

	c) To encourage the development of C&D waste recycling facilities at suitable sites, including quarries, subject to normal planning and environmental considerations.
Development Plan Objective: Air Pollution	
CDP 8.34	It is an objective of the Development Plan: To implement the provisions of national policy and air pollution legislation, in conjunction with other agencies as appropriate.
Development Plan Objective: Light Pollution	
CDP8.35	It is an objective of the development plan: a) To require proposals for development that include the provision of external lighting, to clearly demonstrate that the lighting scheme is the minimum needed for security and working purposes; b) To ensure that external lighting and lighting schemes are designed so that the incidence of light spillage is minimised ensuring that the amenities of adjoining properties, wildlife and the surrounding environment are protected.
Development Plan Objective: Climate Change Adaptation	
CDP18.2	It is an objective of Clare County Council: a) To endeavour to implement elements of Sectoral Adaptation Plans, prepared in accordance with the Climate Action and Low Carbon Development Act 2015, as they relate to the work of Clare County Council; b) To liaise with all relevant stakeholders to prepare a Climate Change Adaptation Strategy for County Clare during the lifetime of this development plan; c) To raise general awareness of issues associated with climate change and climate change adaptation during the lifetime of this plan
Development Plan Objective: Protected Species and Proposed Works to Buildings	
CDP15.6	It is an objective of the development plan: To protect habitats and species when considering proposed works to buildings which are likely to impact on protected ecological sites and protected species

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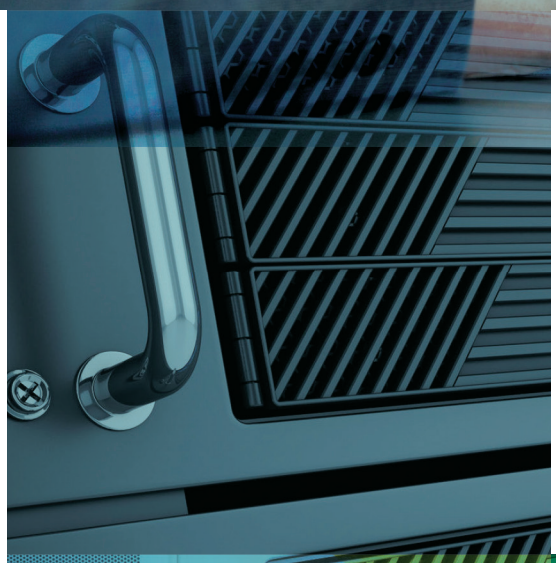

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Variation No.1

Clare County Development Plan 2017–2023
Natura Impact Report
11th March 2019