Sligo County Council

Climate Ready Sligo

Report for the Purposes of AA Screening

Ref/1

Draft 1 | 16 May 2019

Job number 267753-00

Ove Arup & Partners Ireland Ltd

Arup
One Albert Quay
Cork
T12 X8N6
Ireland
www.arup.com

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Document Verification

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Job title		Climate Ready Sligo		Job number 267753-00
Document title		Report for the Purposes of AA Screening		File reference
Document ref		Ref/1		
Revision	Date	Filename	AA screening DR1.docx	
Draft 1	16 May 2019	Description	First draft	
			Prepared by	Checked by	Approved by
		Name	Sarah Kelliher Ailsa Doyle	Fiona Patterson	Clodagh O'Donovan
		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			
		Filename			
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			Prepared by	Checked by	Approved by
		Name			
		Signature			
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			Prepared by	Checked by	Approved by
		Name			
		Signature			
				Issue Document Verification with Document	✓

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1 Introduction

1.1 Overview

Under the requirements of the *Climate Action and Low Carbon Development Act 2015* Sligo County Council have prepared *Climate Ready Sligo* - the Draft Climate Change Adaptation Strategy for County Sligo, for the period 2019-2024 (hereafter referred to as the Draft Adaptation Strategy) which sets out strategic priorities, measures and responses for adaptation in County Sligo over the next five years.

This Report for the Purposes of Appropriate Assessment (AA) Screening (hereafter referred to as the óAA Screening Reportô) contains information required for Sligo County Council (SCC), as the competent authority, to undertake screening for AA for the Draft Adaptation Strategy.

The findings of this AA Screening Report will assist SCC in making a determination as to whether the Draft Adaptation Strategy is likely to give rise to significant effects on any Natura 2000 sites. Thus, the aims of this AA Screening Report are to:

- Provide information on, and assess the potential for the Draft Adaptation Strategy to significantly effect Natura 2000 sites (also known as European Sites);
- Determine whether the Draft Adaptation Strategy is directly connected with, or necessary to, the conservation management of any Natura 2000 sites; and
- Determine whether the Draft Adaptation Strategy, alone or in combination with other projects, is likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

1.1 Layout of Report

The screening information presented in this report is as follows:

- Overview of the Draft Adaptation Strategy and receiving environment, refer to **Section 2**;
- Ecological Overview (refer to **Section 3**) and identification of relevant Natura 2000 sites (European sites) within the zone of influence of the Draft Adaptation Strategy , refer to **Section 4**;
- Assessment of likely significant effects on Natura 2000 Sites, refer to **Section 5**; and
- Conclusions and Screening Statement, refer to **Section 6**.

1.2 Guidance and Data Sources

This report has been prepared with regard to the following guidance documents, where relevant:

- *"Managing Natura 2000 sites- The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC"* (EC Environment Directorate-General, 2018);
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001);
- *Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC.* (European Commission, 2007);
- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;*
- *Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive* (International Workshop on Assessment of Plans under the Habitats Directive, 2011); and
- *Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine* (Institute of Ecology and Environmental Assessment, September 2018).

Sources of information that were used to collect data on the Natura 2000 network of sites and on the existing ecological environment are listed below:

- Google aerial photography (viewed on 25th April 2019);
- National Parks and Wildlife Service online data on European Sites and (www.npws.ie) (viewed on 25th April 2019);
- National Parks and Wildlife Service online data on protected flora and fauna (viewed on 25th April 2019);
- Information on environmental quality data available from www.epa.ie (EPA Online Environmental Map Viewer) (viewed on 25th April 2019);
- Information on environmental water quality data available from (EPA, www.catchments.ie);
- Draft Regional Spatial and Economic Strategy for the Northern and Western Region 2019
- Regional Planning Guidelines 2010 - 2022
- National Adaptation Framework 2018
- River Basin Management Plan for Ireland (2018-2021)
- Sligo County Development Plan 2017-2023;

- AA Screening Report for the Draft Sligo County Development Plan 2017-2023 (and Natura Impact Report for the proposed amendments to the Draft Sligo County Development Plan 2017-2023);
- Sligo County Heritage Plan 2016-2020; *and*
- Sligo Biodiversity Action Plan 2010-2015.

1.3 Legislative Background

According to the EU Habitats Directive (92/43/EEC) and the EU Birds Directive (79/409/EEC), Member States are required to establish a Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU.

In Ireland, the Natura 2000 network of European sites includes Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats. The Annex habitats and species, for which each site is selected, are the *qualifying interests* (QI) of the site. *Conservation objectives* for the site are defined for these qualifying interests.

A key requirement of the Directives is that the effects of any plan or project, alone, or in combination with, other plans or projects, on the Natura 2000 site network, should be assessed before any decision is made to allow that plan or project to proceed. This process is known as Appropriate Assessment (AA). The obligation to undertake an Appropriate Assessment derives from Article 6(3) and 6(4) of the Habitats Directive (92/43/EEC), and both involve a number of steps and tests that need to be applied in sequential order.

Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances.

Article 6(3) of the Habitats Directive states:

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

Article 6(4) states:

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

The competent authority is required to carry out Appropriate Assessment, as required by Article 6(3) and 6(4) of the Habitats Directive, as follows:

- **Stage 1 – Screening for Appropriate Assessment** ï to assess, in view of best scientific knowledge, if the plan or project individually or in combination with another plan or project is likely to have a significant effect on the Natura 2000 site.
- **Stage 2 – Appropriate Assessment** ï This is required if it cannot be excluded, on the basis of objective information, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a Natura 2000 site. The appropriate assessment must include a final determination by the competent authority as to whether or not a proposed development would adversely affect the integrity of a Natura 2000 site. In order to reach a final determination, the competent authority must undertake examination, analysis and evaluation, followed by findings, conclusions and a final determination. The appropriate assessment must contain complete, precise and definitive findings and conclusions, and may not have lacunae or gaps.
- **Stage 3 – Assessment of alternative solutions –** The process which examines alternative ways of achieving the objectives of the project or plan that avoid significant effects on the integrity of the Natura 2000 site.
- **Stage 4 – Assessment where no alternative solutions exist and where significant effects remain –** an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

1.4 Requirements for AA Screening

Prior to the commencement of the AA Screening process, it is first necessary to determine whether the Draft Adaptation Strategy constitutes a ôplanô or ôprojectô within the meaning of the Habitats Regulations (S.I. No. 477 of 2011).

Section 3.4.2 of the European Commission document on managing Natura 2000 sites, *The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC* states the following, with regards to the interpretation of the term ôplanô under Article 6(3) of the Habitats Directive:

ñé *a distinction needs to be made with 'plans' which are in the nature of policy statements, i.e. policy documents which show the general political will or intention of a ministry or lower authority. An example might be a general plan for sustainable development across a Member State's territory or region. It does not seem appropriate to treat these as 'plans' for the purpose of Article 6(3), particularly if any initiatives deriving from such policy statements must pass through the intermediary of a land-use or sectoral plan (C 179/06, paragraph 41). However, where the link between the content of such an initiative and likely significant effects on a Natura 2000 site is clear and direct, Article 6(3) should be applied.*ò

As indicated above, the purpose of the Draft Adaptation Strategy is to set out a policy framework to be pursued in relation to climate change adaptation in County Sligo. It does not identify specific locations, be they Natura 2000 sites or otherwise, nor does it propose specific projects in respect of those sites. Identification of specific projects and of locations or sites will be detailed via lower level implemtation plans or development plans, and may undergo Appropriate Assessment, as appropriate.

This is affirmed by Action No. 7 of Goal 3 of the Draft Adaptation Strategy which sets out the intention of the Council to ñ*Develop Implementation Plans for each Adaptation Action and monitor and report on progress.*ò Further, Action No 1. of Goal 2 of the Draft Adaptation Strategy sets out the intention of the Council to ñ*Ensure that prominence of Climate Change is maintained within the CDP and ensure all CC related actions in CDP are followed through and achieved...*ò

Thus, having regard to the purpose, and provisions of the Draft Adaptation Strategy, the same could be considered to constitute a ópolicy statementôunder EC Guidance, and may not be subject to the requirement for AA, under Article 6(3) of the Habitats Directive.

Nevertheless, in accordance with the EC Guidance and indeed the precautionary principle, the ó*content of such an initiative*ôï i.e. the provisions of, and Adaptation Actions proposed, the Draft Adaptation Strategy have been considered with regards potential for significant effects on Natura 2000 sites.

Section 6 of this AA Screening Report details the outcome of this screening assessment.

2 Brief Description of the Draft Adaptation Strategy

2.1 Introduction

This section provides a description of the Draft Adaptation Strategy, and other plans and projects that ón combinationô, have the potential to have significant effects on a European or Natura 2000 site.

2.1.1 Overview of the Draft Adaptation Strategy

The Draft Adaptation Strategy sets out the strategic priorities, measures and responses of Sligo County Council for adaptation in County Sligo over the next five years, as required by the Climate Action and Low Carbon Development Act 2015.

While the Draft Adaptation Strategy recognises and builds on adaptation action already underway, it also lays the groundwork for a new, integrated approach to adaptation under the National Adaptation Framework. Further, it requires climate change principles and objectives to be considered in all of Sligo County Councils policies and programs.

The aim of the Draft Adaptation Strategy is to identify the risks, challenges and opportunities that need to be considered, and to take coherent coordinated action in response. The Councils Vision of a Climate Ready Sligo is to achieve:

ñ*A County that understands how climate change will affect the region, our businesses and communities, and actively working together to reduce our exposure to climate risks and to capture new opportunities.*"

In order to achieve this vision, Sligo County Council has established three strategic Goals, and a range of Objectives which provide an overarching framework for climate adaptation planning in Sligo:

Goal 1- Ensure adequate relevant information on Climate Change & Sustainability is made available for anyone who has concerns about related issues

Goal 2- Increase the resilience of the Built and Natural Environment to Climate Change by planning and implementing appropriate adaptation measures

Goal 3- To ensure that Sligo County Council is adequately prepared for the projected impacts of Climate Change in the future.

As a next step, the Draft Adaptation Strategy identifies a number of Objectives which define strategies or implementation steps to attain the identified Goals. The Objectives identified are common to each of the strategic Goals and constitute one or more of the following: engage, plan or adapt:

Engage- Improve education, awareness raising and capacity on climate change, adaptation (and mitigation), impact reduction and early warning across the Local Authority departments, businesses, communities and individuals.

Plan- Integrate climate change measures into policies, strategies and planning, as well as the identification of areas at risk to inform planning and decision - making.

Adapt- Strengthen resilience and adaptive capacity and develop and implement co-ordinated responses to climate risk where needed.

Further to the identification of the strategic Goals and Objectives, SCC has established a range of specific Actions. These óAdaptation Actionsô will be developed and implemented by SCC, following preparation of lower level implementation plans, with priority awarded to actions where severe weather has impacted the safety of citizens and critical infrastructure. The proposed Adaptation Actions are included in **Appendix B**.

Figure 2.1 illustrates the steps that makes up the Draft Adaptation Strategy.

Figure 2.1: The Draft Adaptation Strategy

3 Ecological Overview

County Sligo supports a diversity of natural and semi-natural habitats and a wide range of plant and animal species, some of which have come under threat. Agricultural lands, woodlands and grasslands represent a variety of habitats and corridors that provide for the movement of wildlife. Woodlands like Slish Wood, Union Wood, Lough Gill Forest and Ben Bulben Forest have significant stands of deciduous trees.

The County falls into the catchments of the Ballysadare, Moy and Garavogue rivers. These rivers, tributaries and associated lakes support good areas of biodiversity.

Man-made habitats within the Plan area are also important biodiversity areas. Gardens provide habitats for wildlife including various bird species, invertebrates, such as bees and butterflies and mammals, such as hedgehogs, mice and foxes. These species move around between gardens using hedgerows and vegetated areas. These urban green spaces, however small, are important, as they form a network of green spaces across the Plan area, linking gardens, parks, graveyards, amenity walks, railway lines and patches of woodland or scrub within which animals and plants continue to thrive.

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. Ecological networks are composed of linear features, such as tree lines, hedgerows, rivers and streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are particularly important for mammals, especially for bats and small birds. Key ecological corridors within the County include the following water bodies (including their tributaries and lakes, where relevant):

- Garavogue
- Moy
- Owenaher
- Easky
- Owenboy
- Unshin
- Owenbeg
- Drumcliff
- Owenmore

There are many different species and habitats within County Sligo, which because of their importance at European and National level, require the designation of areas for their conservation. Almost 20% of Co. Sligo is designated for nature conservation and there is an exceptional variety of habitat types to be found within the county.

4 Natura 2000 sites and Zone of Influence of the Draft Adaptation Strategy

4.1.1 Overview

The zone of influence comprises the area within which the Draft Adaptation Strategy may potentially affect the conservation objectives or qualifying interests (QI) of a Natura 2000 site. There is no recommended zone of influence, and guidance from the National Parks and Wildlife Service (NPWS) recommends that the distance should be evaluated on a case-by-case basis and that that the appropriate assessment process should include the following Natura 2000 sites:

1. Any Natura 2000 sites within or adjacent to the plan or project area.
2. Any Natura 2000 sites within the likely zone of impact of the plan or project. A distance of 15km is currently recommended in the case of plans, and derives from UK guidance (Scott Wilson et al., 2006). For projects, the distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects.
3. Natura 2000 sites that are more than 15km from the plan or project area depending on the likely impacts of the plan or project, and the sensitivities of the ecological receptors, bearing in mind the precautionary principle.

Natura 2000 sites (also referred to as European sites) are only at risk from significant effects where a source-pathway-receptor link exists between a project/plan and a Natura 2000 site(s). This can take the form of a direct effect (e.g. where the project/plan and/or associated construction works are located within the boundary of the Natura 2000 site(s)) or an indirect effect where impacts outside of the Natura 2000 site(s) affect ecological receptors within (e.g. impacts to water quality which can affect riparian habitats or indeed marine habitats at a distance from the impact source). Consideration is therefore given to the source-pathway-receptor linkage and associated risks between the Draft Adaptaion Stratgey and Natura 2000 sites.

4.1.2 Zone of Influence of the Draft Adaptation Strtagey

As outlined in Section 2.1.1, the Draft Adaptation Strategy sets out the strategic priorities, measures and responses of SCC for [Climate] adaptation in County Sligo over the next five years.

As part of the Draft Adaptation Strtagey, SCC has established a range of óAdaptation Actionsô which will be developed and implemented by SCC over the lifetime of the Strategy. The Draft Adaptation Strategy does not, however, define specific projects (including locations) relating to these Actions. The identification of specific projects and locations will be detailed via lower level implementation plans and may undergo AA, as required.

This is affirmed by Action No. 7 of Goal 3 of the Draft Adaptation Strategy which sets out the intention of the Council to ñ*Develop Implementation Plans for each Adaptation Action and monitor and report on progress.*ò Further, Action No 1. of Goal 2 of the Draft Adaptation Strategy sets out the intention of the Council to ñ*Ensure that prominence of Climate Change is maintained within the CDP and ensure all CC related actions in CDP are followed through and achieved...*ò

The Zone of Influence of the Draft Adaptation Strategy is therefore difficult to define at this high-level stage, in that the influencing potential of the same will likely be dependent on the emerging projects (including locations) of the Draft Adaptation Stratgey, the likely significant effects of the same, and the sensitivities of the ecological receptors.

As a general rule of thumb, it is often considered appropriate to examine all Natura 2000 sites within 15km as a starting point. Thus, for the purposes of this assessment, all those Natura 2000 sites within the County Sligo, as well as those within a 15km distance from the County border are considered the ózone of Influenceô of the Draft Adaptation Stratgey having regards to the precautionary principle.

However, as discussed, the Zone of Influence of the Draft Adaptation Strategy could be significantly less than 15km, depending on the resulting projects (including locations) of the Draft Adaptation Strategy.

In some instances, Natura 2000 sites outside of the Zone of Influence may also need to be considered, depending on the likely significant effects of the plan or project, and the sensitivities of the ecological receptors, For example, the spatial sensitivity of a QI of a Natura 2000 site may need to be considered (i.e. the area within which the QI may be present and therefore could be affected).

It should be noted that this assessment was carried out on the understanding that any works proposed under the Adaptation Actions which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. Similarly, where Adaptation Actions give rise to other plans or programmes which could be considered to constitute the definition of the same under the Habitats Regulations, the plan or programme should similarly be subject to AA prior to adoption, as required. The Zone of Influence t of relevance to specific projects or plans would be determined at that lower-level stage.

4.2 Natura 2000 sites within the Zone of Influence

This section provides an overview of the Natura 2000 sites identified within the Zone of Influence of the Draft Adaptation Strategy.

As outlined in Section 1.3, the Natura 2000 network of European sites includes Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds).

SPAs are selected for the conservation of Annex I birds and all migratory birds and their habitats. The Annex habitats and species, for which each site is selected, are the qualifying interests (QI) of the site. Conservation objectives for the site are defined for these qualifying interests.

Consultation of NPWS online data identified some 31 Natura 2000 located within the border of county Sligo. This includes 20 SACs and 11 SPAs. **Table A1** in **Appendix A** outlines all those Natura 2000 sites identified as being within County Sligo, and the QIôs for which they are designated.

Consultation of NPWS online data identified a further 44 Natura 2000 located within 15km of the Sligo county border. This includes 30 SACs and 14 SPAs **Table A2** in **Appendix A** outlines all those Natura 2000 sites identified as being located within a 15km buffer from the county border and the Qualifying Interests (QIôs) for which they are designated.

As discussed in **Section 4.1.1**, in some instances, Natura 2000 sites outside of the Zone of Influence may need to be considered, depending on the likely significant effects of the plan or project, and the sensitivities of the ecological receptors, bearing in mind the precautionary principle. While not included in **Table A1** or **A.2**, this assessment has had due regard to Natura 2000 sites outside the Zone of Influence in the consideration of potential for significant environmental effects in respect of the precautionary principal and potential for source-path-receptor linkages.

Natura 2000 sites within the Zone of influence are illustrated in **Figure 4.1** and **Figure 4.2**.

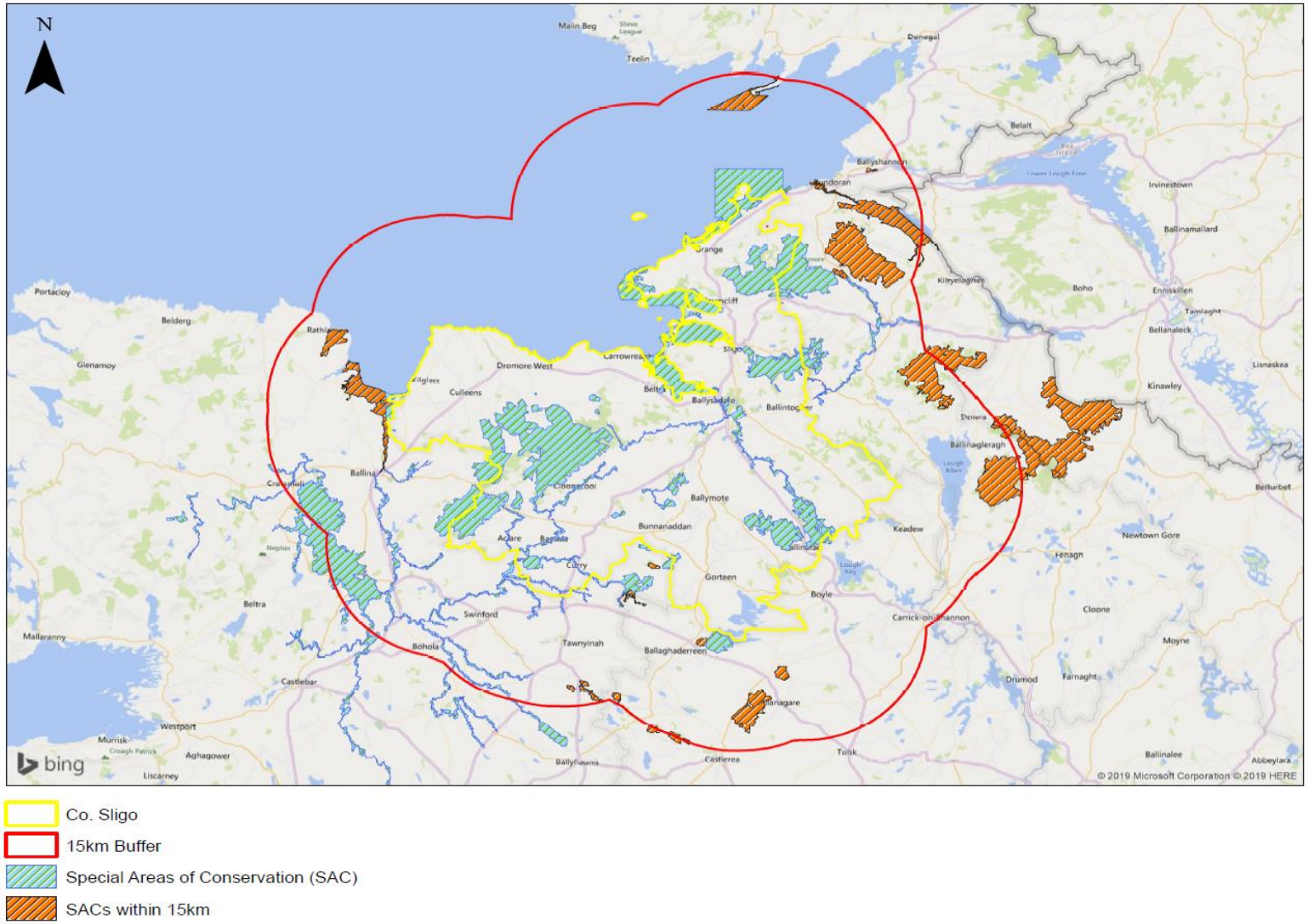

Figure 4.1: SACs within the Zone of Influence

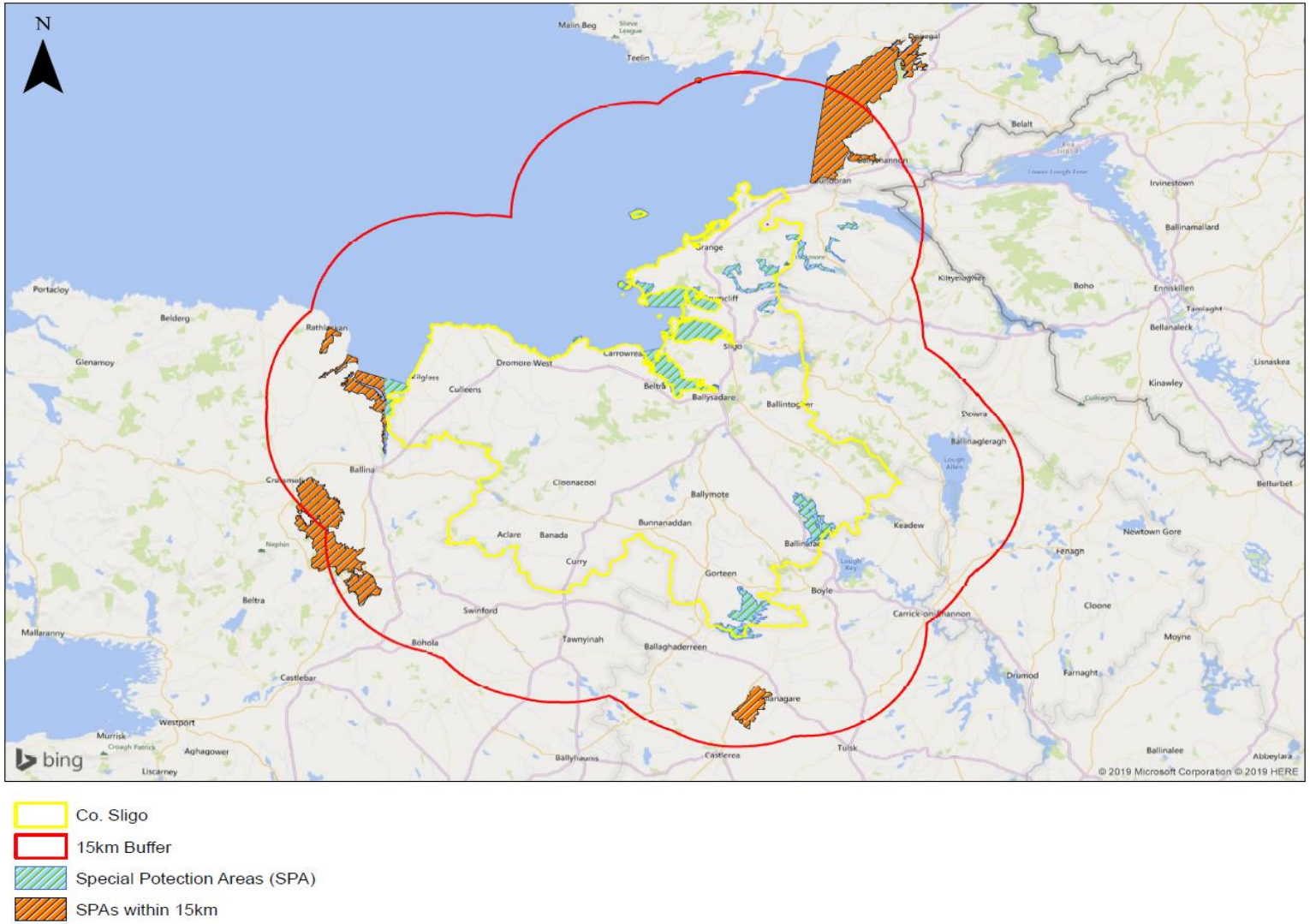

Figure 4.2: SPA's within the Zone of Influence

4.3 Other Designated Sites within the Zone of Influence

Natural Heritage Areas (NHAs) and Proposed Natural Heritage Areas (pNHAs) can be considered ósstepping stonesô between Natura 2000 sites and are therefore considered in this assessment.

NHAs were derived from the older Areas of Scientific Interest (ASIs) and include the best remaining areas of Irelandôs natural and semi-natural habitats. Sites may have been selected by virtue of having special scientific significance for one or more species, communities, habitats, landforms, or geological or geomorphological features, or for a diversity of natural attributes. Depending on their quality and importance, NHAs may carry other designations including SAC, SPA, Statutory Nature Reserve or National Park.

Consultation of NPWS online data identified some 3 NHAs located within the border of county Sligo, and a further 9 NHAs located within a 15km of the county border. **Table A3** and **Table A4** in Appendix A list all those NHAs identified as being within the Zone of Influence of the Draft Adaptation Strategy.

Some 35 pNHAs have also been identified as being location within the Zone of Influence of the Draft Adaptation Strategy.

While not included in **Table A3** and **A.4**, NHAs and pNHAs located outside the Zone of Influence were given due regard in the consideration of potential for significant effects, in respect of the precautionary principal and potential for source-path-receptor linkages.

Other designated sites within the Zone of influence are illustrated in **Figure 4.3** and **Figure 4.4**.

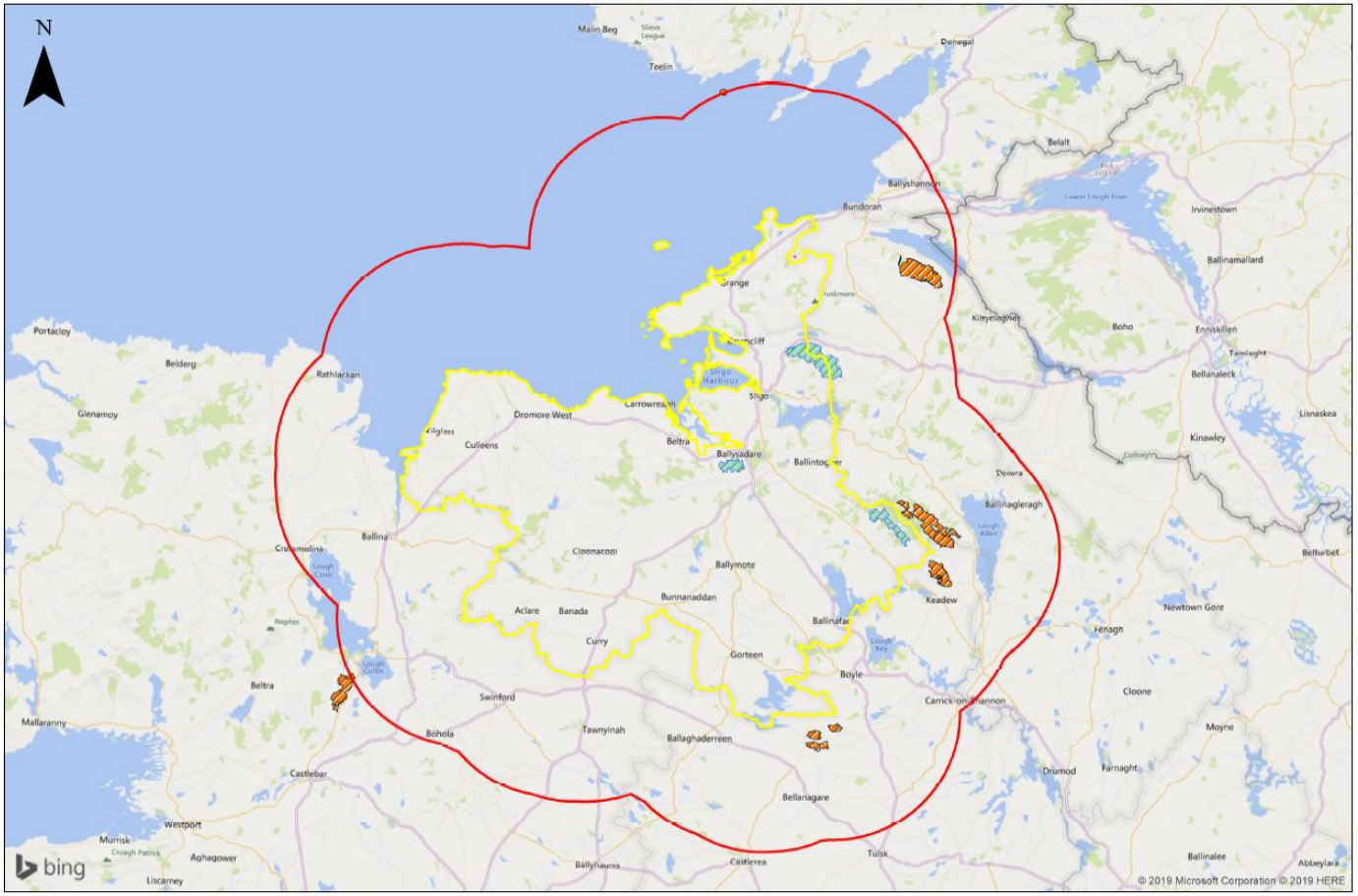

Figure 4.3: NHA's within the Zone of Influence

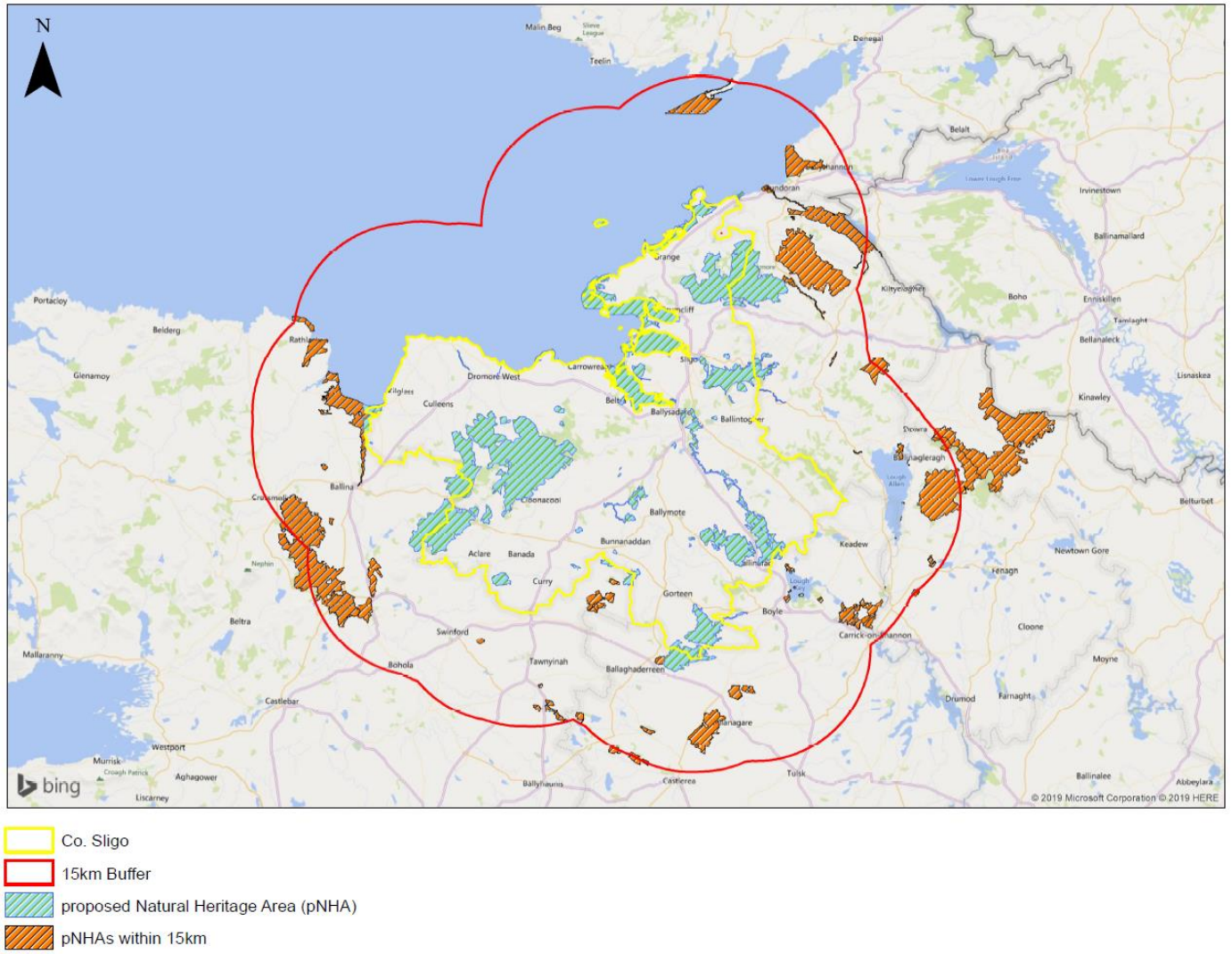

Figure 4.4: pNHA's within the Zone of Influence

5 Assessment of Potential for Significant Effects on Natura 2000 Sites

5.1 Introduction

As outlined in **Section 1**, the findings of this AA Screening Report will assist SCC in making a determination as to whether the Draft Adaptation Strategy is likely to give rise to any significant adverse effects on any Natura 2000 sites. Thus, the aims of this AA Screening Report are to:

- Provide information on, and assess the potential for the Draft Adaptation Strategy to significantly effect Natura 2000 sites (Refer to **Section 5.1.1**);
- Determine whether the Draft Adaptation Strategy is directly connected with, or necessary to, the conservation management of any Natura 2000 sites (Refer to **Section 5.1.2**); and
- Determine whether the Draft Adaptation Strategy, alone or in combination with other projects, is likely to have significant effects on Natura 2000 sites in view of their conservation objectives (Refer to **Section 5.1.3**).

This section provides an overview of the assessment of the Draft Adaptation Strategy, and the Adaptation Actions contained therein.

5.1.1 Potential for Significant Effects on Natura 2000 Sites

As outlined in **Section 4.2**, there are 75 Natura 2000 sites located within the ôZone of Influenceôof the Draft Adaptation Strategy.

The DoEHLG (2009) have advised that policies and objectives (or in this case ôActionsô) found at Stage 1 AA screening to have no significant effect can include Actions that:

- Will not lead to development;
- Are intended to protect the natural environment, including biodiversity (see Article 10 of Directive);
- Are intended to conserve or enhance the natural, built or historic environment and are unlikely to have an effect on a Natura 2000 site;
- Positively steer development away from Natura 2000 sites and associated sensitive areas;
- Positively make provision to ensure that the policy/objective implementation will not have a significant effect or adverse effect on the integrity of a Natura 2000 site; or,
- Policies and objectives that can be dealt with by using a caveat or conditional approach requiring, where necessary, a case by case AA.

Thus, in order to adequately assess the provisions of the Draft Adaptation Strategy, each of the proposed Adaptation Actions were considered with regards potential for significant effects on the Natura 2000 sites identified within the Zone of Influence (and beyond, where considered appropriate having regard to the precautionary principle). Refer to **Appendix B** for the detailed assessment of the proposed Adaptation Actions.

As outlined in the 2018 EC report ó*Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*, ñ*where one or more specific projects are included in a plan in a general way but not in terms of project details, the assessment made at plan level does not exempt the specific projects from the assessment requirements of Article 6(3) at a later stage, when much more details about them are known*.ò

This assessment was therefore carried out on the understanding that any works proposed under the Adaptation Actions which could be considered to constitute a ópróiectô within the definition of the Habitats Regulations should be subject AA at project level, as required. Similarly, where Adaptation Actions give rise to other plans or programmes which could be considered to constitute the definition of the same under the Habitats Regulations, the plan or programme should similarly be subject to AA prior to adoption, as required.

The purpose of the Draft Adaptation Strategy is to assist SCC in preparing for climate change through climate adaptation; developing a comprehensive understanding of how a changing climate will affect the County and its communities; and actively working to reduce exposure to new and increased risks. By taking proactive action to adjust and prepare for anticipated changes, SCC will work to achieve a reduction in losses, improved environmental health, and provision of a host of community benefits. Ultimately, the Draft Adaptation Plan will work to reduce the risk to County Sligo of the effects of climate change.

Thus, in considering the overall nature of the Adaptation Actions, and in the understanding that this assessment does not exempt the specific projects from the assessment requirements of Article 6(3) at a later stage, no potential for significant effects on Natura 2000 sites was identified in the assessment of the proposed Adaptation Actions.

5.1.2 Determination of Connectivity to, or Necessity for the Management of, Natura 2000 Sites

Under the Habitats Directive, plans that are directly connected with, or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s).

The relationship should be shown to be direct and not a byproduct of the plan, even if this might result in positive or beneficial effects for a site(s). The primary purpose of the Draft Adaptation Strategy is not the nature conservation management of the sites.

Thus, the Draft Adaptation Strategy is not considered, in accordance with the provision of the Habitats Directive, to be directly connected with, or necessary to the management of European designated sites.

5.1.3 Potential for In-Combination/Cumulative Effects on Natura 2000 Sites

Other plans and programmes that have the potential to result in any in-combination or cumulative effects with the Draft Adaptation Strategy are considered in this Section.

It is considered extremely unlikely that significant in-combination or cumulative effects arising from interaction with other plans or programmes could arise, as each plan or programme has either been subject to the Appropriate Assessment process or provides for biodiversity protection i.e. the County Sligo Biodiversity Action Plan 2010 - 2015.

Each Stage 2 AA or Stage 1 AA Screening concluded that significant effects on Natura 2000 sites arising from the plan or project in question were considered extremely unlikely.

Sligo County Development Plan 2017-2023

The Sligo County Development Plan, and its Proposed Amendments have undergone AA.

The AA Screening Report for the Draft Sligo County Development Plan concluded that:

ñ*the implementation of the proposed draft Sligo County Development Plan 2017-2023 will not have a significant effect on the Natura 2000 network and Stage 2 Appropriate Assessment is not required at this stage of the plan making process*ò

A Natura Impact Report (NIR) was prepared relating to the Proposed Amendments to the Draft Sligo County Dvelopment Plan 2017-2023, following a period of public consultation on the same. The NIR concluded that:

ñ*The adoption of the proposed amendment (A-MP-23-4) would conflict with the provisions of the Habitats Directive and the nature conservation policies, set out in Section 7.1.1 of CDP (Vol. 1). Furthermore, the adoption of the Draft Plan with amendment (A-MP-23-4) would contravene Section 177. V(c) of the Planning and Development Act 2000 (as amended), which specifies that planning authorities shall make a land use plan only after having determined that the said plan would not adversely affect the integrity of a European site.*

Accordingly, on the basis of the Precautionary Principle, it can be objectively concluded that adverse impacts of the proposed amendment (A-MP-23-4) on the integrity of the Unshin River Natura 2000 site remain and that the proposed amendment should not be adopted as part of the Draft Sligo County Development Plan 2017-2023."

The subject Proposed Amendment was subsequently not transposed into the final Sligo County Development Plan, which came into effect on 28 August 2017. The NIR did not identify any other potential for significant effects.

No adverse in-combination or cumulative effects with the Draft Adaptation Strategy are predicted as a result of implementation.

National Adaptation Framework 2018

The National Adaption Framework was subject to a ópre-screeningô check to determine the requirement for AA Screening.

This pre-screening process indicated that while the purpose of the framework is to set out a policy framework to be pursued in relation to climate change adaptation; it will not identify specific locations, be they Natura 2000 sites or otherwise, nor will it propose adaptation measures or projects in respect of those sites. Adaptation approaches and identification of locations or sites will be detailed via lower level adaptation plans and strategies which may undergo appropriate assessment, as appropriate

The pre-screening process set out above has indicated that the administrative provisions of Articles 9(1) and 9(3) of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations, as amended have been not been fulfilled and an SEA would not, therefore, be required for the National Adaptation Framework. Similarly, an appropriate assessment of the Framework in accordance with the Habitats Directive (Directive 92/43/EEC) as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 447 of 2011), is also assessed as not being required.

No adverse in-combination or cumulative effects with the Draft Adaptation Strategy are predicted as a result of implementation.

Sligo Heritage Plan 2016-2020

While this Plan has not undergone AA, it should be noted that it sits under the Sligo CDP, which has undergone AA Screening and has placed emphasis on the protection of Natura 2000 sites. The aim of the County Sligo Heritage Plan is ñ*To inspire our community to know, value and care for Sligo's unique heritage and to increase awareness, appreciation and enjoyment of our heritage for all*ò.

No adverse in-combination or cumulative effects with the Draft Adaptation Strategy are predicted as a result of implementation.

Sligo Biodiversity Plan 2010-2015

While this Plan has not undergone AA, it should be noted that it sits under the Sligo CDP, which has undergone AA Screening and has placed emphasis on the protection of Natura 2000 sites. The nature of the Biodiversity Plan is to conserve biodiversity including Natura 2000 sites that make up the Natura 2000 network. No in-combination effects with the Draft Adaptation Strategy are predicted as a result of implementation.

No adverse in-combination or cumulative effects with the Draft Adaptation Strategy are predicted as a result of implementation.

Regional Planning Guidelines 2010 - 2022

An NIR was prepared with regards the Regional Planning Guidelines for the West Region 2010-2022. The findings of the report concluded that:

"The Habitats Directive Appropriate Assessment identified a number of key planning and development issues in the Guidelines which, when implemented, have the potential to result in negative impacts on one or more Natura 2000 site and issues may therefore arise under Article 6 of the EU Habitats Directive which will require Appropriate Assessment at 'lower plan' or project level. Where such 'lower plan' or project level Appropriate Assessment concludes significant negative impacts, alternative solutions which comply fully with Article 6 of the EU Habitats Directive may need to be considered."

No adverse in-combination or cumulative effects with the Draft Adaptation Strategy are predicted as a result of implementation.

Draft Regional Spatial and Economic Strategy for the Northern and Western Region 2019

An NIR was prepared with regards the Draft Regional Spatial and Economic Strategy. The findings of which are outlined below:

"The spatial dimension of the N&W RSES has the potential to give rise to direct and indirect effects on biodiversity, flora and fauna in European Sites in Ireland and Northern Ireland through habitat loss, destruction, fragmentation or degradation; disturbance to species; species mortality; alternations to water quality and hydrology; alteration to air quality, introduction and transfer of invasive species among other issues. However, it also offers the opportunity to integrate nature into decision making and allow the benefits of biodiversity to be appreciated, and where appropriate harnessed. In the absence of detail with regards to finalised controls or mitigation measures at this early stage as well as the unknowns in relation to the potential effects on water, air and sensitive habitats, it is considered that there is a likelihood of significant effects occurring on one or more European Sites."

The NIR subsequently put forward an Overall Mitigation Strategy which, in summary, is that:

"potential Likely Significant Effects (LSE) or Adverse Effects on Site Integrity (AESI) will be considered fully at project level during pre-planning design and AA, when the specific effects of a development option can be reduced or eliminated through targeted project specific surveys and iterative design, in order to limit the potential for LSEs or AEIS. Targeted and 'appropriate' evaluation and analysis will be undertaken at initially CPD level andultimately project stage, supported where necessary with site‐specific or project‐specific surveys or studies. Project level Screening for Appropriate Assessment and if applicable Natura Impact Statements shall be prepared for all projects falling out of the RSES."

In considering that plans and projects ermerging from the Draft RSES will be subject to AA at a lower-level stage, no adverse in-combination or cumulative effects with the Draft Adaptation Strategy are predicted as a result of implementation.

River Basin Management Plan for Ireland (2018-2021)

A Natura Impact Statement was prepared River Basin Management Plan for Ireland (2018-2021). The NIS conclusion stated that:

It is the conclusion of this Natura Impact Statement that the RBMP will not adversely affect the integrity of any European site with the implementation of measures presented within this NIS.

No adverse in-combination or cumulative effects with the Draft Adaptation Strategy are predicted as a result of implementation.

6 Conclusion and Screening Statement

The aims of this report were as follows:

- Provide information on, and assess the potential for the Draft Adaptation Strategy to significantly effect Natura 2000 Sites;
- Determine whether the Draft Adaptation Strategy is directly connected with, or necessary to, the conservation management of any Natura 2000 sites; and
- Determine whether it can be excluded, on the basis of objective information and beyond reasonable scientific doubt, that the Draft Adaptation Strategy, alone or in combination with other projects, will a have significant effect on any Natura 2000 sites in view of their conservation objectives.

It has been objectively concluded by Arup that:

- There is no potential for the Draft Adaptation Strategy, in particular the proposed Adaptation Actions, to significantly effect Natura 2000 sites.
- The Draft Adaptation Strategy is not directly connected with, or necessary to the conservation management of any Natura 2000 sites.
- The Draft Adaptation Strategy, alone or in combination with other plans or programmes, is not likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

It can therefore be concluded, on the basis of objective information and beyone a reasonable scientific doubt, that the Draft Adapration Strategy will have no significant effects on these sites. It is the view of Arup that it is not necessary to undertake any further stage of the Appropriate Assessment process for the Draft Adaptation Strategy.

7 References

Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC (EC Environment Directorate-General, 2000)*;* [hereafter referred to as MN 2000];

Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001);

Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC. (European Commission, 2007);

Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 revision);

Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;

Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011);

Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine (Institute of Ecology and Environmental Assessment, September 2018):

Google aerial photography (viewed on 25th April 2019);

National Parks and Wildlife Service online data on European Sites and (www.npws.ie) (viewed on 25th April 2019);

National Parks and Wildlife Service online data on protected flora and fauna (viewed on 25th April 2019);

Information on environmental quality data available from www.epa.ie (EPA Online Environmental Map Viewer) (viewed on 25th April 2019);

Information on environmental water quality data available from (EPA, www.catchments.ie);

Draft Regional Spatial and Economic Strategy for the Northern and Western Region 2019;

Regional Planning Guidelines 2010-2022;

National Adaptation Framework 2018;

River Basin Management Plan for Ireland (2018-2021); *and*

Sligo County Development Plan 2017-2023.

Appendix A

Natura 2000 Sites Within the Zone of Influence

A1 Natura 2000 Sites within the Zone of Influence

Table A1: Natura 2000 sites within County Sligo

Site Name	Site Code	Qualifying Interests (QIs)	
		Habitats	Species
SAC's			
Ballysadare Bay	000622	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Phoca vitulina (Harbour Seal) [1365]
Ben Bulben, Gleniff and Glenade Complex	000623	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] 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] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Transition mires and quaking bogs [7140] Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230]	Vertigo geyeri (Geyer's Whorl Snail) [1013] Lutra lutra (Otter) [1355]

Site Name	Site Code	Qualifying Interests (QIs)	
		Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) [8120] Calcareous rocky slopes with chasmophytic vegetation [8210]	
Bricklieve Mountains and Keishcorran	001656	Turloughs [3180] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) [8120]	Euphydryas aurinia (Marsh Fritillary) [1065] Austropotamobius pallipes (White-clawed Crayfish) [1092]
Bunduff Lough and Machair/Trawalua/Mullaghmore	000625	Mudflats and sandflats not covered by seawater at low tide [1140] Large shallow inlets and bays [1160] Reefs [1170] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] 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] Alkaline fens [7230]	Euphydryas aurinia (Marsh Fritillary) [1065] Petalophyllum ralfsii (Petalwort) [1395]
Cummeen Strand/Drumcliff Bay (Sligo Bay)	000627	Site code000627 Designation Special Area of Conservation (SAC) County Sligo CoordinatesLatitude: 54.3215	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Petromyzon marinus (Sea Lamprey) [1095] Lampetra fluviatilis (River

Site Name	Site Code	Qualifying Interests (QIs)	
		Longitude: -8.58275 Features of Interest Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Petrifying springs with tufa formation (Cratoneurion) [7220]	Lamprey) [1099] Phoca vitulina (Harbour Seal) [1365]
Doocastle Turlough	000492	Turloughs [3180]	
Flughany Bog	000497	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	
Killala Bay/Moy Estuary	000458	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Petromyzon marinus (Sea Lamprey) [1095] Phoca vitulina (Harbour Seal) [1365]

Site Name	Site Code	Qualifying Interests (QIs)	
		Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]	
Knockalongy and Knockachree Cliffs	001669	-	Trichomanes speciosum (Killarney Fern) [1421]
Lough Arrow	001673	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	-
Lough Gill	001976	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]
Lough Hoe Bog	000633	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Blanket bogs (* if active bog) [7130]	Vertigo geyeri (Geyer's Whorl Snail) [1013] Austropotamobius pallipes (White-clawed Crayfish) [1092]
Lough Nabrickkeagh Bog	000634	Blanket bogs (* if active bog) [7130]	-
Ox Mountains Bogs	002006	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Blanket bogs (* if active bog)	Vertigo geyeri (Geyer's Whorl Snail) [1013] Saxifraga hirculus (Marsh Saxifrage) [1528]

Site Name	Site Code	Qualifying Interests (QIs)	
		[7130] Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150]	
River Moy	002298	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]
Streedagh Point Dunes	001680	Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]
Templehouse and Cloonacleigha Loughs	000636	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	-
Turloughmore (Sligo)	000637	Turloughs [3180]	-
Union Wood	000638	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	-
Unshin River	001898	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous	Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]

Site Name	Site Code	Qualifying Interests (QIs)	
		substrates (Festuco-Brometalia) (* important orchid sites) [6210] 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]	
SPAs			
Ardboline Island and Horse Island	004135	-	Cormorant (Phalacrocorax carbo) [A017] Barnacle Goose (Branta leucopsis) [A045]
Aughris Head	004133	-	Kittiwake (Rissa tridactyla) [A188]
Ballintemple and Ballygilgan	004234	-	Barnacle Goose (Branta leucopsis) [A045]
Ballysadare Bay	004129	-	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Grey Plover (Pluvialis squatarola) [A141] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]
Cummeen Strand	004035	-	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]
Drumcliff Bay	004013	-	Sanderling (Calidris alba) [A144] Bar-tailed Godwit (Limosa lapponica) [A157] Wetland and Waterbirds [A999]
Inishmurray	004068	-	Shag (Phalacrocorax aristotelis) [A018] Barnacle Goose (Branta leucopsis) [A045]

Site Name	Site Code	Qualifying Interests (QIs)	
			Herring Gull (Larus argentatus) [A184] Arctic Tern (Sterna paradisaea) [A194]
Killala Bay/Moy Estuary SPA	004036	-	Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]
Lough Arrow	004036	-	Little Grebe (Tachybaptus ruficollis) [A004] Tufted Duck (Aythya fuligula) [A061] Wetland and Waterbirds [A999]
Lough Gara	004048	-	Whooper Swan (Cygnus cygnus) [A038] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]
Sligo/Leitrim Uplands	004187	-	Peregrine (Falco peregrinus) [A103] Chough (Pyrrhocorax pyrrhocorax) [A346]

Table A2: Natura 2000 Sites within 15km of the Sligo County Border

Site Name	Site Code	Qualifying Interests (QIs)	
		Habitats	Species
SAC's			
Lough Melvin	000428	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-	Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]

		Nanojuncetea [3130] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	
Killala Bay/ Moy Estuary	000458	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Petromyzon marinus (Sea Lamprey) [1095] Phoca vitulina (Harbour Seal) [1365]
Flughany Bog	000497	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	
Cuilcagh - Anierin Uplands	000584	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog)	Drepanocladus vernicosus (Slender Green Feather-moss) [1393]

		[7130] Transition mires and quaking bogs [7140] Petrifying springs with tufa formation (Cratoneurion) [7220] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Siliceous rocky slopes with chasmophytic vegetation [8220]	
Bellanagare Bog	000592	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	
Callow Bog	000595	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	
Ballysadare Bay	000622	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Phoca vitulina (Harbour Seal) [1365]
Ben Bulben, Gleniff And Glenade Complex	000623	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands	Vertigo geyeri (Geyer's Whorl Snail) [1013] Lutra lutra (Otter) [1355]

		and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Transition mires and quaking bogs [7140] Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) [8120] Calcareous rocky slopes with chasmophytic vegetation [8210]	
Bunduff Lough And Machair/Trawalua/Mullagh more	000625	Mudflats and sandflats not covered by seawater at low tide [1140] Large shallow inlets and bays [1160] Reefs [1170] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Machairs (* in Ireland) [21A0] 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] Alkaline fens [7230]	Euphydryas aurinia (Marsh Fritillary) [1065] Petalophyllum ralfsii (Petalwort) [1395]
Cummeen	000627	Estuaries [1130]	Vertigo angustior (Narrow-

Strand/Drumcliff Bay (Sligo Bay)		Mudflats and sandflats not covered by seawater at low tide [1140] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Petrifying springs with tufa formation (Cratoneurion) [7220]	mouthed Whorl Snail) [1014] Petromyzon marinus (Sea Lamprey) [1095] Lampetra fluviatilis (River Lamprey) [1099] Phoca vitulina (Harbour Seal) [1365]
Lough Hoe Bog	000633	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Blanket bogs (* if active bog) [7130]	Vertigo geyeri (Geyer's Whorl Snail) [1013] Austropotamobius pallipes (White-clawed Crayfish) [1092]
Arroo Mountain	001403	Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Blanket bogs (* if active bog) [7130] Petrifying springs with tufa formation (Cratoneurion) [7220] Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii) [8120] Calcareous rocky slopes with chasmophytic vegetation [8210]	
Urlaur Lakes	001571	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	
Lough Arrow	001673	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]	
Unshin River	001898	Water courses of plain to	Salmo salar (Salmon) [1106]

		montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Lutra lutra (Otter) [1355]
Lough Gill	001976	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]
Ox Mountains Bogs	002006	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150]	Vertigo geyeri (Geyer's Whorl Snail) [1013] Saxifraga hirculus (Marsh Saxifrage) [1528]
Boleybrack Mountain	002032	Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010]	

		European dry heaths [4030] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Blanket bogs (* if active bog) [7130]	
River Moy	002298	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]
Dunmuckrum Turloughs	002303	Turloughs [3180]	-
Drumalough Bog	002338	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	-
Glenade Lough	001919	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Austropotamobius pallipes (White-clawed Crayfish) [1092] Najas flexilis (Slender Naiad) [1833]	-
Tullaghanrock Bog	002354	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	-
Cloonakillina Lough	001899	Transition mires and quaking bogs [7140]	-
Doocastle Turlough	000492	Turloughs [3180]	-
Cloonshanvill	000614	Active raised bogs [7110]	-

e Bog		Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Bog woodland [91D0]	
Derrinea Bog	000604	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	-
St. John's Point	000191	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Alkaline fens [7230] Limestone pavements [8240] Submerged or partially submerged sea caves [8330]	Euphydryas aurinia (Marsh Fritillary) [1065]
Streedagh Point Dunes	001680	Mudflats and sandflats not covered by seawater at low tide [1140] Perennial vegetation of stony banks [1220] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]
Lackan Saltmarsh and Kilcummin Head	000516	Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia	-

		maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	
SPAs			
Drumcliff Bay	004013	-	Sanderling (Calidris alba) [A144] Bar-tailed Godwit (Limosa lapponica) [A157] Wetland and Waterbirds [A999]
Cummeen Strand	004035	-	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]
Killala Bay/Moy Estuary	004036	-	Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]
Lough Gara	004048	-	Whooper Swan (Cygnus cygnus) [A038] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]
Lough Arrow	004050	-	Little Grebe (Tachybaptus ruficollis) [A004] Tufted Duck (Aythya fuligula) [A061] Wetland and Waterbirds [A999]
Inishmurray	004068	-	Shag (Phalacrocorax aristotelis) [A018] Barnacle Goose (Branta leucopsis) [A045] Herring Gull (Larus argentatus) [A184]

			Arctic Tern (Sterna paradisaea) [A194]
Bellanagare Bog	004105	-	Greenland White-fronted Goose (Anser albifrons flavirostris) [A395]
Inishduff	004115	-	Shag (Phalacrocorax aristotelis) [A018]
Ballysadare Bay	004129	-	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Grey Plover (Pluvialis squatarola) [A141] Dunlin (Calidris alpina) [A149] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]
Aughris Head	004133	-	Kittiwake (Rissa tridactyla) [A188]
Ardboline Island and Horse Island	004135	-	Cormorant (Phalacrocorax carbo) [A017] Barnacle Goose (Branta leucopsis) [A045
Donegal Bay	004151	-	Great Northern Diver (Gavia immer) [A003] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Common Scoter (Melanitta nigra) [A065] Sanderling (Calidris alba) [A144] Wetland and Waterbirds [A999]
Sligo/Leitrim Uplands	004187	-	Peregrine (Falco peregrinus) [A103] Chough (Pyrrhocorax pyrrhocorax) [A346]
Lough Conn and Lough Cullin	004228	-	Tufted Duck (Aythya fuligula) [A061] Common Scoter (Melanitta nigra) [A065] Common Gull (Larus canus) [A182] Greenland White-fronted Goose (Anser albifrons flavirostris) [A395] Wetland and Waterbirds [A999]

Table A3: NHAs within County Sligo

Site Name	Site Code	Qualifying Interests (QIô¸)	
		Habitats	Species
NHAs			

Slieveward Bog NHA	001902	Peatlands [4]	-
Carrane Hill Bog NHA	002415	Peatlands [4]	-
Crockauns/Keelogyboy Bogs NHA	002435	Peatlands [4]	-

Table A4: NHAs within 15km of the Sligo County Border

Site Name	Site Code	Qualifying Interests (QIôs)	
		Habitats	Species
NHAs			
Inishduff	000151		Birds [12]
Bella Bridge Bog	000591	Peatlands [4]	-
Cornaveagh Bog	000603	Peatlands [4]	-
Kilronan Mountain Bog	000617	Peatlands [4]	-
Tullaghan Bog (Roscommon)	001652	Peatlands [4]	-
Corry Mountain Bog	002321	Peatlands [4]	-
Cunnagher More Bog	002420	Peatlands [4]	-
Aghavoghil Bog	002430	Peatlands [4]	-
Crockauns/Keelogyboy Bogs	002435	Peatlands [4]	-

Appendix B

Assessment of Significant Effects on Natura 2000 Sites- Proposed Adaptation Actions

B1 Assessment of Potential for Significant Effects on Natura 2000 Sites within the Zone of Influence

Table B.1: Assessment of Potential for Significant Effects- Proposed Adaptation Actions

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
Goal 1: Develop in-house expertise & understanding about the impacts of Climate Change locally and to make sure that this information is made available	
Actively seek engagement during public consultation process and ensure that any relevant observations or amendments are included in final draft.	This Action will successfully contribute to climate adaptation in County Sligo by increasing awareness of climate change and its associated impacts among the community and ensuring relevant observations/ are included in the final Adaptation Strategy. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Engage with relevant agencies or groups to identify areas/communities potentially at risk from Climate Change	This Action will successfully contribute to climate adaptation in County Sligo by identifying those areas most at risk to climate change and ensuring contingency and adaptation planning is focused in these areas. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Build and strengthen partnerships and promote cross-sectoral communication and cooperation in the implementation of Local Authority and Sectoral Adaptation Plans	This Action will successfully contribute to climate adaptation in County Sligo by ensuring that the Adaptation Actions proposed under the Draft Adaptation Strategy are complementary and mutually reinforcing with those of other Local Authority Adaptation Plans and Sectoral Adaptation plans, thus avoiding conflicting outcomes. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Provide web-based resource to maintain the provision of up to date and relevant information on climate related issues	This Action will successfully contribute to climate adaptation in County Sligo through increased community awareness of the risk and range of climate changes and their impacts. No potential significant effects on Natura 2000 sites are predicted to result from the implementation

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
	of this Adapation Action.
Develop formal links with Sligo IT in relation to Climate Change (including energy & sustainability) matters. Utilise the academic resources available locally to maintain & update information resources that are made available to the public.	This Action will successfully contribute to climate adaptation in County Sligo through increased community awareness of the risk and range of climate changes and their impacts, availability of academic resources to aid climate change research and provision of information to the public. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Liaise with Marine Institute/Dept of Marine about the installation/ maintenance of a sea level monitor in Sligo Bay.	This Action will successfully contribute to climate adaptation in County Sligo by facilitating the identification of sea-level rise and the adoption of responsive actions or mitigation measures. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Goal 2: Increase the resilience of the Built and Natural Environment to Climate Change by planning and implementing appropriate adaptation measures	
Ensure that prominence of Climate Change is maintained within the CDP and ensure all CC related actions in CDP are followed through and achieved (See CDP CC related policies in Appendix 1.2)	This Action will successfully contribute to climate adaptation in County Sligo by ensuring that the Adaptation Actions are implemented at local level, through the Irish Planning system. All County or Local Area Plans, and their relevant policies and objectives will be subject to AA prior to adoption. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Monitor climate related events & create/update risk register. (Register of weather warnings provided etc.)	This Action will successfully contribute to climate adaptation in County Sligo by acquiring a database of knowledge on climate related events and identifying key risks. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
Compile relevant local Climate Impact maps	This Action will successfully contribute to climate adaptation in County Sligo by identifying those areas most at risk to climate change and ensuring contingency and adaptation planning is focused in these areas. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Develop a Sustainable Transport Plan for Co. Sligo (which should include provision for staff welfare facilities and bicycle maintenance program)	This Action will successfully contribute to climate adaptation in County Sligo through the promotion of, and planning for, sustainable transport use in the county. Where Adaptation Actions give rise to other plans or programmes which could be considered to constitute the definition of the same under the Habitats Regulations, the plan or programme will be subject to AA prior to adoption, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Identify LA owned properties that may be suitable for 'greening' activities, such as community gardens or allotments, Pollinator sites, tree planting or other activities which would support Climate Awareness initiatives.	This Action will successfully contribute to climate adaptation in County Sligo through the provision of increased biodiversity and enhanced ecosystem adaptation. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Install 3 X water bottle refilling stations in strategic locations as an initial phase of developing a program to re-introduce taps for public use throughout the County.	This Action will successfully contribute to climate adaptation in County Sligo through the promotion of a reduction in single-use plastic and waste generation. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
	of this Adapation Action.
Install an Air Quality Monitoring station in Sligo Town, and use data obtained to improve awareness about air quality.	This Action will successfully contribute to climate adaptation in County Sligo through increased community awareness of the risk of poor air quality. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Update the tenants handbook and the online communication and social media plan to provide the necessary climate change resilience information.	This Action will successfully contribute to climate adaptation in County Sligo by identifying key risks to infrastructure and the built environment and introducing measures to ensure that the upmost resilience to these risks is achieved. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Identify old and derelict buildings that may cause a risk to public safety during extreme weather events, and take appropriate action	This Action will successfully contribute to climate adaptation in County Sligo by identifying key risks to infrastructure and the built environment and introducing measures to ensure that the upmost resilience to these risks is achieved. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Where possible, work with Sligo SEC to identify funding opportunities for retrofit programs for LA housing.	This Action will successfully contribute to climate adaptation in County Sligo by assisting the Council in identifying the most vulnerable housing stock and to enable the retrofitting of the same to enhance resilience to climate change. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
	within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Complete existing pilot project concerning retrofitting an older house to modern energy standards	This Action will successfully contribute to climate adaptation in County Sligo by assisting the Council in identifying the most vulnerable housing stock and to enable the retrofitting of the same to enhance resilience to climate change. Any works proposed under this Adaptation Action which could be considered to constitute a ópojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Work with and support Irish Water in identifying vulnerable public drinking water supplies or waste water treatment infrastructure and develop contingency plans in order to maintain access to water and waste water services.	This Action will successfully contribute to climate adaptation in County Sligo by protecting the public water supply from the effects of climate change. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Develop a register of critical equipment, systems and assets at risk from existing and project climate events	This Action will successfully contribute to climate adaptation in County Sligo by identifying key risks to infrastructure and the built environment. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Ensure that impact of Climate related events on natural & cultural heritage is considered when reviewing the Heritage Plan.	This Action will successfully contribute to climate adaptation in County Sligo by making provisions for the protection of heritage against climate impacts. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Review & adopt Invasive Alien Species policy and consider the possibility of	This Action will successfully contribute to climate adaptation in County Sligo by ensuring that

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
expanding this to a Biodiversity Policy.	projected climate change is taken into consideration in Invasive Species and biodiversity policy. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Ensure that the Flood Risk Management Policies outlined in the CDP, as well as the Strategic Flood Risk Assessment, are implemented in full (See Appendix 1.2). To include: Flood Protection; Flood Management; Flood Mapping; Register of Hard & Soft Flood Infrastructure	This Action will successfully contribute to climate adaptation in County Sligo by reducing the risk of flooding and the impacts of the climate change on watercourses and coastlines. The Sligo CDP 2017-2023 and its relevant polieis and objectives have been subject to AA. All future CDPs and LAPs will be subject to AA, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Identify contractors and/or individuals who can grit roads that Council Staff are unable to reach.	This Action will successfully contribute to climate adaptation in County Sligo by ensuring measures are in place to prevent accidents and maintain access during periods of extreme cold weather. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Increase use of 'hotmix' for improved quality roads (Lessens the impact of extended hot or cold periods on road surfaces)	This Action will successfully contribute to climate adaptation in County Sligo by ensuring measures are in place to prevent accidents and maintain access during periods of extreme hot or cold weather. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Provide grit/salt storage facilities in strategic local areas where the Local Authority	This Action will successfully contribute to climate adaptation in County Sligo by ensuring measures

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
may not be able to reach.	are in place to prevent accidents and maintain access during periods of extreme cold weather. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Extend the Winter Service Plan to include additional roads.	This Action will successfully contribute to climate adaptation in County Sligo by ensuring measures are in place to prevent accidents and maintain access during periods of extreme cold weather. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Provide adequate lifeguard & beach warden cover for beaches during extended periods of warm weather.	This Action will successfully contribute to climate adaptation in County Sligo by ensuring measures are in place to prevent accidents during extended periods of warm weather. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Ensure that adequate staff are available to deal with extreme events.	This Action will successfully contribute to climate adaptation in County Sligo by ensuring adequate staff are available to deal with extreme events. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Ensure that adequate plant is available to deal with extreme events.	This Action will successfully contribute to climate adaptation in County Sligo by ensuring adequate plant is available to deal with extreme events. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Goal 3: To ensure that Sligo County Council is adequately prepared for the projected impacts of Climate Change in the future.	
Convene a Climate Action/Energy/Sustainability Team & assign responsibility for	This Action will successfully contribute to climate adaptation in County Sligo by facilitating the

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
implementation (CAEST)	successful delivery of the proposed Adaptation Actions. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Ensure that adequate internal resources are identified to progress the actions identified draft adaptation strategy	This Action will successfully contribute to climate adaptation in County Sligo by facilitating the successful delivery of the proposed Adaptation Actions. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Include Climate Action & Sustainability on the agenda of all Section meetings	This Action will successfully contribute to climate adaptation in County Sligo by ensuring climate change and sustainability is kept at the forefront of council actions and discussions. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Include Green Procurement when revising Corporate Procurement Policy. Include Energy reporting for all potential contractors and possible use of EPCs in future.	This Action will successfully contribute to climate adaptation in County Sligo by integrating climate change and sustainability, as well as energy reporting into the procurement policy of the Council. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Include the objective of being Climate Ready as a Strategic Goal of the Corporate Plan (See Appendix 1.1 for current Climate related content)	This Action will successfully contribute to climate adaptation in County Sligo by integrating climate adaptation as a Strategic Goal of the Corporate Plan. The Council are committed to delivering the strategic goals of the Corporate Plan, and their corresponding actions over the Plan period. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Prepare an annual progress report on adaptation strategy which will be submitted to the Council with the draft budget	This Action will successfully contribute to climate adaptation in County Sligo by ensuring the Elected Members and public are kept up-to-date on climate change risks, impacts and adaptation and mitigation measures in the County. No potential significant effects on Natura 2000 sites are predicted to result from the implementation

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
	of this Adapation Action.
Develop Implementation Plans for each Adaptation Action and monitor and report on progress	This Action will successfully contribute to climate adaptation in County Sligo by facilitating the successful delivery of the proposed Adaptation Actions. Where Adaptation Actions give rise to other plans or programmes which could be considered to constitute the definition of the same under the Habitats Regulations, the plan or programme will be subject to AA prior to adoption, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Review and update the Major Emergency Plan to take account of the changing climate, frequency and severity of climatic events.	This Action will successfully contribute to climate adaptation in County Sligo by ensuring that emergency response plans for County Sligo adequately address potential for extreme weather events and potential impacts of the same. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Review and update the Health & Safety Statements and Risk Assessments to take account of the changing climate, frequency and severity of climatic events.	This Action will successfully contribute to climate adaptation in County Sligo by ensuring that Health & Safety Statements and Risk Assessments for County Sligo adequately address potential for extreme weather events and potential impacts of the same. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Encourage and promote projects/businesses that will contribute positively and grow the Circular and Bio-economy to promote sustainable rural and urban economic development as part of the overall aim of transiting to a low carbon economy	This Action will successfully contribute to climate adaptation in County Sligo by supporting businesses or projects that will contribute to the bio-economy, support a shift to a low carbon economy and consequently promote climate change mitigation or adaptation. Any development or works proposed under this Adaptation Action which could be considered to constitute a ópróiectô within the definition of the Habitats Regulations should be subject AA at project level, as required.

Adaptation Actions	Potential for Significant Effects on Natura 2000 Sites
	No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Develop a Climate Change Awareness Programme for business and start-ups to inform them of climate action measures that can be integrated into business activities, and identify business supports and funding options to businesses seeking to become more resilient to climate change events.	This Action will successfully contribute to climate adaptation in County Sligo by promoting and enabling climate preparedness and resilience at local level and respond to the impacts of climate change locally. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
Install simple net filters on surface water discharge points to remove any plastic waste before it enters Sligo Bay.	No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.
During remediation works at the closed Finisklin landfill site, ensure that the most climate friendly approach is taken, and consider innovative solutions such as bio-filters. Use the remediation works as an opportunity for promoting awareness about waste management and its impact on climate.	This Action will successfully contribute to climate adaptation in County Sligo by promoting proper waste management and ensuring that the Finisklin landfill adopts climate friendly remediation. Any works proposed under this Adaptation Action which could be considered to constitute a óprojectô within the definition of the Habitats Regulations should be subject AA at project level, as required. No potential significant effects on Natura 2000 sites are predicted to result from the implementation of this Adapation Action.

Appendix C

Findings of No Significant Effects

C1 Findings of No Significant Effects

Name of Project/ Plan:

Climate Ready Sligo- the Draft Climate Change Adaptation Strategy for County Sligo, for the period 2019-2024 (the Draft Adaptation Strategy)

Names of Natura 2000 Sites of relevance to the proposed development:

Refer to Table A.1 and Table A.2 of **Appendix A**.

Is the project or plan directly connected with or necessary to the management of the site?

No.

Are there other projects or plans that together with the project or plan being assessed could affect the site?

No.

THE ASSESSMENT OF SIGNIFICANCE OF EFFECTS

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.

It has been determined by Arup that it is possible to rule out likely significant effects on any Natura 2000 sites.

Explain why these effects are not considered significant.

- There is no potential for the Draft Adaptation Strategy, in particular the proposed Adaptation Actions, to significantly effect Natura 2000 sites.
- The Draft Adaptation Strategy is not directly connected with, or necessary to the conservation management of any Natura 2000 sites.
- The Draft Adaptation Strategy, alone or in combination with other plans or programmes, is not likely to have significant effects on Natura 2000 sites in view of their conservation objectives.

DATA COLLECTED TO CARRY OUT THE ASSESSMENT

Who carried out the assessment?

The assessment was supervised, checked and completed by Fiona Patterson, an Arup ecologist.

Sources of Data:

Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC (EC Environment Directorate-General, 2000); [hereafter referred to as MN 2000];

Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001);

Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC. (European Commission, 2007);

Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 revision);

Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 and PSSP 2/10;

Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011);

Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater, Coastal and Marine (Institute of Ecology and Environmental Assessment, September 2018):

Google aerial photography (viewed on 25th April 2019);

National Parks and Wildlife Service online data on European Sites and (www.npws.ie) (viewed on 25th April 2019);

National Parks and Wildlife Service online data on protected flora and fauna (viewed on 25th April 2019);

Information on environmental quality data available from www.epa.ie (EPA Online Environmental Map Viewer) (viewed on 25th April 2019);

Information on environmental water quality data available from (EPA, www.catchments.ie);

Draft Regional Spatial and Economic Strategy for the Northern and Western Region 2019;

Regional Planning Guidelines 2010-2022;

National Adaptation Framework 2018;

River Basin Management Plan for Ireland (2018-2021); and

Sligo County Development Plan 2017-2023.

OVERALL CONCLUSIONS

Based on the information provided above, and by applying the precautionary principle, it has been determined by Arup that It can be concluded, on the basis of objective information and beyond a reasonable scientific doubt that the Draft Adaptation Strategy will have no significant effects on any Natura 2000 sites. and therefore, it is the view of Arup that it is not necessary to undertake any further stage of the Appropriate Assessment process for the Draft Adaptation Strategy.