# APPROPRIATE ASSESSMENT SCREENING REPORT

### FOR

# DRAFT CLIMATE CHANGE ADAPTION STRATEGY FOR KILKENNY COUNTY COUNCIL

May 2019

# **ON BEHALF OF**

CLIMATE ACTION REGIONAL OFFICE (CARO)



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# **1** INTRODUCTION

#### 1.1 Background

Member States are required to designate Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) under the EU Habitats and Birds Directives, respectively. SACs and SPAs are collectively known as Natura 2000 sites. An 'Appropriate Assessment' (AA) is a required assessment to determine the likelihood of significant impacts, based on best scientific knowledge, of any plans or projects on Natura 2000 sites. A screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site, in view of its conservation objectives.

This AA Screening has been undertaken to determine the potential for significant impacts on nearby Sites with European conservation designations (i.e. Natura 2000 Sites). The purpose of this assessment is to determine, the appropriateness, or otherwise, of the proposed development in the context of the conservation objectives of such sites.

#### **1.2 Legislative Context**

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of SACs and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of SPAs. It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community.

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a Natura 2000 Site, and paragraphs 3 and 4 states that:

6(3) 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.

6(4) 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 a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.



The current assessment was conducted within this legislative framework and the published DEHLG (2009) guidelines. As outlined in these, it is the responsibility of the proponent of the project to provide a comprehensive and objective Screening for Appropriate Assessment, which can then be used by the competent authority in order to conduct the Appropriate Assessment (DEHLG, 2009).

#### 1.3 Stages of AA

This Appropriate Assessment Screening Report (the "**Screening Report**") has been prepared by Enviroguide Consulting which considers whether the proposed Draft Climate Change Adaptation Strategy is likely to have a significant effect on a European Site and whether a Stage 2 Appropriate Assessment is required.

The AA process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

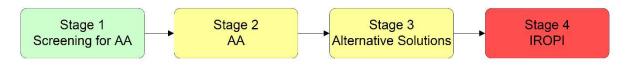


FIGURE 1. THE FOUR STAGES OF THE APPROPRIATE ASSESSMENT PROCESS (DEHLG, 2010).

The four stages of an AA can be summarised as follows:

- Stage 1: *Screening*. The first stage of the AA process is to determine the likelihood of significant impacts of a proposal.
- Stage 2: *Natura Impact Statement (NIS)*. The second stage of the AA process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site, with respect to the conservation objectives of the site and its ecological structure and function. A Natura Impact Statement containing a professional, scientific examination of the proposal is required and should include any mitigation measure to avoid, reduce or offset negative impacts.
- Stage 3: Assessment of alternative solutions. If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain. The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 site, where no less damaging solution exists.

The purpose of Stage 1, the Screening Stage is to determine the necessity or otherwise for a NIS. Screening for AA examines the likely effects of a project or plan alone, and in combination with other projects or plans, upon a Natura 2000 site, and considers whether it can be objectively concluded that these effects will not be significant.



If it is determined during screening stage that the proposal may have a significant effect on a Natura 2000 site, or such a significant effect cannot be ruled out, then a NIS will need to be prepared. The Screening is outlined in Section 2.

#### 1.4 Screening Steps

This Screening for AA, or Stage 1 of AA, has been undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2000). Screening for AA involves the following:

- Establish whether the Plan is necessary for the management of a Natura 2000 site;
- Description of the Plan;
- Identification of Natura 2000 sites potentially affected;
- Identification and description of individual and cumulative impacts likely to result from the plan;
- Assessment of the significance of the impacts identified above on site-integrity; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

This Stage 1, Screening, examines whether likely effects upon a Natura 2000 site will be significant and determines whether the AA process for the proposed Plan alone and in combination with other developments in the area requires a Stage 2.

#### 1.5 Stage 1 Screening Assessment Methodologies

#### 1.5.1 Desk Study

A desk study was carried out to evaluate all available information on the areas natural environment. This comprised a review of a wide range of available publications, datasets and resources where applicable, including the following sources:

- Draft Climate Change Adaptation Strategy Kilkenny County Council;
- National Parks and Wildlife Service (NPWS) datasets;
- Geological Survey Ireland (GSI) online datasets and mapping;
- Environmental Protection Agency (EPA) mapping and datasets;
- National Biodiversity Data Centre (NBDC) online mapping and species records;
- OSI aerial imagery and Discovery Series mapping;
- Satellite imagery from various sources and dates (Google, Digital Globe, Bing);
- The Status of EU Protected Habitats in Ireland (NPWS);

For a complete list of the specific documents consulted as part of this assessment, see *Section 4 References*.

#### 1.5.2 Assessment of Impacts

Once the potential impacts that may arise from Kilkenny County Councils Draft Climate Change Adaptation Strategy are identified, the significance of these is assessed using key indicators:

- Habitat loss or alteration;



- Habitat / species fragmentation;
- Disturbance and / or displacement of species;
- Changes in population density; and
- Changes in water quality and resource.

In line with the EPA Guidelines (EPA, 2017), the following terms are defined when quantifying duration:

Description of Duration	Corresponding Time Frame
Momentary Effects	Effects lasting from seconds to minutes
Brief Effects	Effects lasting less than a day
Temporary Effects	Effects lasting less than a year
Short-term Effects	Effects lasting one to seven years.
Medium-term Effects	Effects lasting seven to fifteen years.
Long-term Effects	Effects lasting fifteen to sixty years
Permanent Effects	Effects lasting over sixty years
Reversible Effects	Effects that can be undone, for example through remediation or restoration
Frequency of Effects	Describe how often the effect will occur. (once, rarely, occasionally, fre- quently, constantly – or hourly, daily, weekly, monthly, annually)

#### TABLE 1. DEFINITION OF DURATIONS (EPA, 2017).

The criterion for confidence levels of the predicted likely impacts are given below in Table 2. The impact significance criteria follow EPA guidance (EPA, 2017).

#### TABLE 2. IMPACT SIGNIFICANCE CRITERIA (EPA, 2017).

Significance of Effects	Definition
Imperceptible	An effect capable of measurement but without significant consequences.
Not significant	An effect which causes noticeable changes in the character of the envi- ronment but without significant consequences.
Slight Effects	An effect which causes noticeable changes in the character of the envi- ronment without affecting its sensitivities.
Moderate Effects	An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
Significant Effects	An effect which, by its character, magnitude, duration or intensity alters a sensitive aspect of the environment



# 2 STAGE 1 SCREENING

#### 2.1 Management of Natura 2000 Site

Kilkenny County Council's Draft Climate Change Adaption is not directly connected with or necessary for the management of Natura 2000 sites in County Kilkenny or elsewhere.

#### 2.2 Description of the Plan

#### 2.2.1 Background

The Earth's Climate is changing. While natural fluctuations in climate are considered normal, emerging research and observational records from across the world show rates of change that are far greater than those experienced in recent history. Global temperatures have risen and are projected to rise further bringing changes in weather patterns, rising sea levels and increased frequency and intensity of extreme weather. Ireland's climate is changing in line with global patterns, and these changes are bringing significant and wide-ranging economic, environmental and social impacts.

Climate change is now recognised as a global challenge with policy responses required in terms of both mitigating the causes of climate change and in adapting to the now inevitable consequences of our changing climate. Action at local level is vitally important to help reduce the risks and impacts of climate change across communities.

This local authority Draft Climate Change Adaptation Strategy forms part of Ireland's national strategy for climate adaptation as set out in the National Adaptation Framework (NAF) which was produced under the provisions of the Climate Action and Low Carbon Development Act 2015.<sup>1</sup>

It is tasked with mainstreaming climate change adaptation over time into all functions, operations and services of the local authority. It seeks to inform or 'climate proof' existing plans and policies produced and implemented by the local authority. This ensures a considered, consistent and coherent approach, facing head-on the challenges of a changing climate. Crucially, it also helps in building resilience within the local authority organisation itself as well as across all communities.

#### 2.2.2 Draft Climate Change Adaptation Strategy Objectives

The purpose of the Kilkenny County Council's Draft Climate Change Adaptation Strategy is to achieve the national objective of becoming a more climate resilient society and economy by 2050. In order to help tackle current and future challenges that climate change can present, Kilkenny County Council has set out a number of key objectives in their strategy, under six thematic principles. The six themes are listed below:

- 1. Energy and Buildings
- 2. Flood Resilience
- 3. Resource Management
- 4. Transport

<sup>&</sup>lt;sup>1</sup> Climate Action and Low Carbon Development Act 2015 (S.I. No. 25/2016).



- 5. Nature-Based Solutions & Communities
- 6. Liaise, collaborate and work in partnership with the sectors identified in the NAF, subject to funding, in the delivery of the Government approved sectoral adaptation actions, where they relate and are relevant to the functions and activities of the council at local level/in local com-munities

Table 3 below outlines Kilkenny Councils Draft Climate Change Adaptation Strategy objectives per theme.

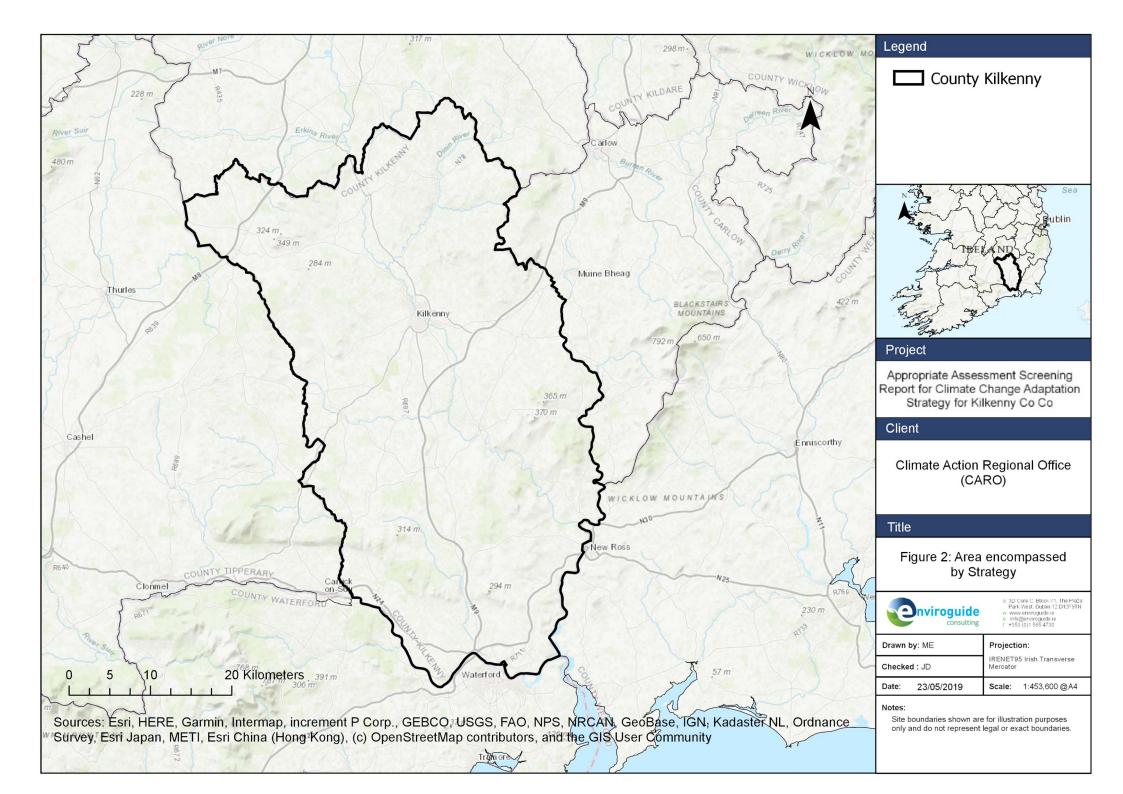
#### TABLE 3. KILKENNY COUNTY COUNCIL DRAFT CLIMATE CHANGE ADAPTATION STRATEGY OBJEC-TIVES

Energy and Buildings
To reduce energy related CO <sub>2</sub> emissions of Kilkenny County Council
To explore improvements in energy efficiency and help identify value for money in energy spendin across the council
To support the increase of renewable energy produced in council operations
To support the reduction of energy imported by the County
To progress Kilkenny County Council's own energy efficiency and renewable energy projects/ pro- grammes and continue to communicate these experiences to inform best practice across all secto
To support the improvement of quality of life and thermal comfort for residents in social houses to help reduce the risk of fuel poverty
To increase the awareness and understanding amongst stakeholders and the general public of the objectives of Kilkenny County Council's Adaptation Plan
Flood Resilience
To mitigate the risk and impact of flooding
To provide and plan for effective drainage systems
To liaise and work with other bodies, agencies responsible for the management of water courses <b>Resource Management</b>
To liaise and work with other bodies and agencies responsible for resource management
To promote and maximise resource management initiatives
To integrate climate action considerations into waste management policies
To identify and support opportunities that may arise from pursuing adaptation efforts through the functions of Kilkenny County Council
Transport
To increase the resilience of roads and transport infrastructure
To ensure that climate adaptation is mainstreamed into all transport activities and operations withi Kilkenny County Council and the wider community.
To build resilience within Kilkenny County Council to support a modal shift among council staff
To identify and support opportunities that may arise from pursuing modal shift efforts through the functions of Kilkenny County Council
To collaborate with other agencies and groups working with communities to enhance the awarene and effectiveness of community programmes related to modal shift
Nature-Based Solutions & Communities
To build capacity and resilience within communities
To collaborate with other agencies and groups working with communities to enhance the effective

To collaborate with other agencies and groups working with communities to enhance the effectiveness of community programmes related to climate change

To protect and encourage climate resilient community Infrastructure





#### 2.2.3 Identification of Relevant Natura 2000 Sites

In identifying potentially affected Natura 2000 sites, it has been decided to adopt the precautionary principle and includes all SPAs and SACs within the Strategy area, including a surrounding 15km buffer zone. Within this overall area, a total of 15 SACs and 4 SPAs are found, each site name, corresponding code and qualifying interests are detailed in Table 4 below.

Site Code	Site Name	Qualifying Interests	Location			
	Special Areas of Conservation (SAC)					
002162	River Barrow and River Nore SAC	<ul> <li>[1130] Estuaries</li> <li>[1140] Tidal Mudflats and Sandflats</li> <li>[1170] Reefs</li> <li>[1310] Salicornia Mud</li> <li>[1330] Atlantic Salt Meadows</li> <li>[1410] Mediterranean Salt Meadows</li> <li>[3260] Floating River Vegetation</li> <li>[4030] Dry Heath</li> <li>[6430] Hydrophilous Tall Herb Communities</li> <li>[7220] Petrifying Springs*</li> <li>[91A0] Old Oak Woodlands</li> <li>[91E0] Alluvial Forests*</li> <li>[1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)</li> <li>[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)</li> <li>[1092] White-clawed Crayfish (<i>Austropotamobius pallipes</i>)</li> <li>[1095] Sea Lamprey (<i>Petromyzon marinus</i>)</li> <li>[1096] Brook Lamprey (<i>Lampetra planeri</i>)</li> <li>[1099] River Lamprey (<i>Lampetra fluviatilis</i>)</li> <li>[1103] Twaite Shad (<i>Alosa fallax</i>)</li> <li>[1106] Atlantic Salmon (<i>Salmo salar</i>)</li> <li>[1421] Killarney Fern (<i>Trichomanes speciosum</i>)</li> <li>[1990] Nore Freshwater Pearl Mussel (<i>Margaritifera durrovensis</i>)</li> </ul>	Within Co. Kil- kenny			
000407	The Loughans SAC	- [3180] Turloughs*	Within Co. Kil- kenny			
000849	Spahill And Clomantagh Hill SAC	- [6210] Orchid-rich Calcareous Grassland*	Within Co. Kil- kenny			
000831	Cullahill Mountain SAC	- [6210] Orchid-rich Calcareous Grassland*	Within Co. Kil- kenny			
001858	Galmoy Fen SAC	- [7230] Alkaline Fens	Within Co. Kil- kenny			

# TABLE 4. NATURA 2000 SITES WITHIN A 15KM RADIUS OF THE STRATEGY AREA. \* = PRIORITY; NUMBERS IN BRACKETS ARE NATURA 2000 CODES



002252	Thomastown Quarry SAC	- [7220] Petrifying Springs*	Within Co. Kil- kenny
002137	Lower River Suir SAC	<ul> <li>[1330] Atlantic Salt Meadows</li> <li>[1410] Mediterranean Salt Meadows</li> <li>[3260] Floating River Vegetation</li> <li>[6430] Hydrophilous Tall Herb Communities</li> <li>[91A0] Old Oak Woodlands</li> <li>[91E0] Alluvial Forests*</li> <li>[91J0] Yew Woodlands*</li> <li>[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)</li> <li>[1092] White-clawed Crayfish (<i>Austropotamobius pallipes</i>)</li> <li>[1095] Sea Lamprey (<i>Petromyzon marinus</i>)</li> <li>[1096] Brook Lamprey (<i>Lampetra planeri</i>)</li> <li>[1099] River Lamprey (<i>Lampetra fluviatilis</i>)</li> <li>[1103] Twaite Shad (<i>Alosa fallax</i>)</li> <li>[1106] Atlantic Salmon (<i>Salmo salar</i>)</li> <li>[1355] Otter (<i>Lutra lutra</i>)</li> </ul>	Within Co. Kil- kenny
000404	Hugginstown Fen SAC	- [7230] Alkaline Fens	Within Co. Kil- kenny
002256	Ballyprior Grassland SAC	- [6210] Orchid-rich Calcareous Grassland*	Within the 15km buffer
000869	Lisbigney Bog SAC	<ul> <li>[7210] Cladium Fens*</li> <li>[1016] Desmoulin's Whorl Snail (Vertigo mou- linsiana)</li> </ul>	Within the 15km buffer
000770	Blackstairs Mountains SAC	- [4010] Wet Heath - [4030] Dry Heath	Within the 15km buffer
001952	Comeragh Mountains SAC	<ul> <li>[3110] Oligotrophic Waters containing very few minerals</li> <li>[3260] Floating River Vegetation</li> <li>[4010] Wet Heath</li> <li>[4030] Dry Heath</li> <li>[4060] Alpine and Subalpine Heaths</li> <li>[8110] Siliceous Scree</li> <li>[8210] Calcareous Rocky Slopes</li> <li>[8220] Siliceous Rocky Slopes</li> <li>[1393] Slender Green Feather-moss (<i>Drepano-cladus vernicosus</i>)</li> </ul>	Within the 15km buffer
000671	Tramore Dunes And Backstrand SAC	<ul> <li>[1140] Tidal Mudflats and Sandflats</li> <li>[1210] Annual Vegetation of Drift Lines</li> <li>[1220] Perennial Vegetation of Stony Banks</li> <li>[1310] Salicornia Mud</li> <li>[1330] Atlantic Salt Meadows</li> <li>[1410] Mediterranean Salt Meadows</li> <li>[2110] Embryonic Shifting Dunes</li> <li>[2120] Marram Dunes (White Dunes)</li> <li>[2130] Fixed Dunes (Grey Dunes)*</li> </ul>	Within the 15km buffer

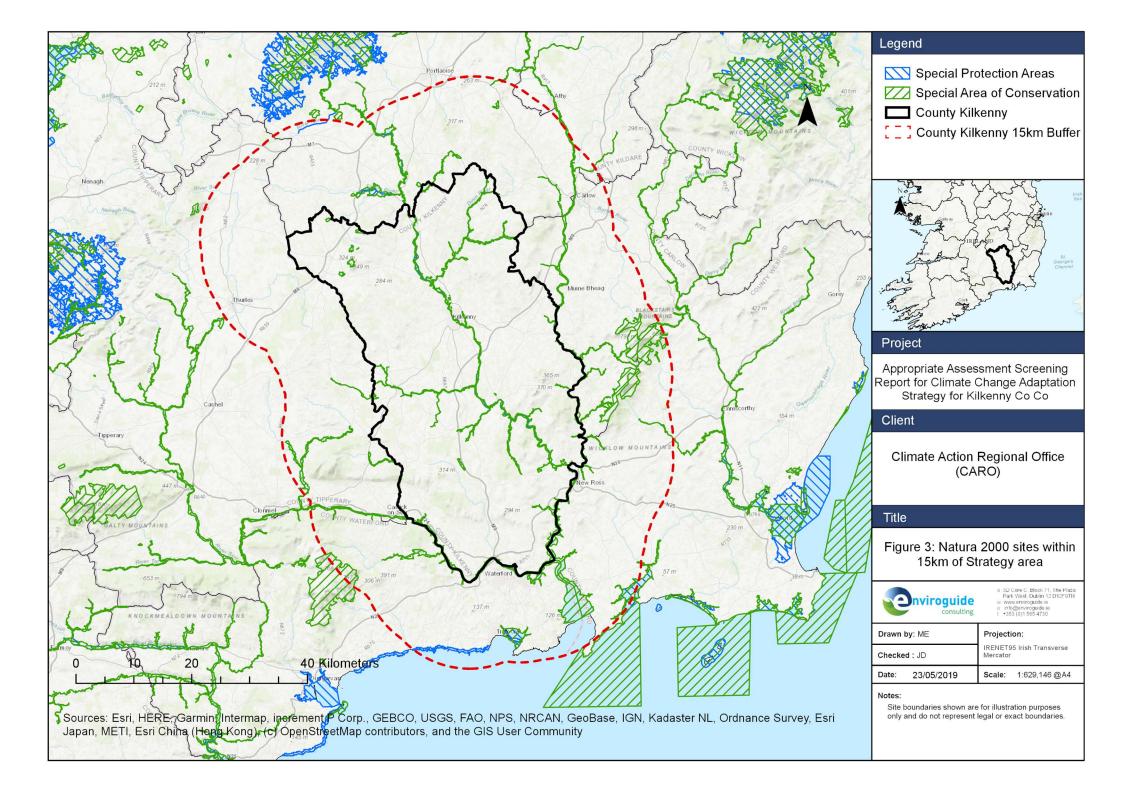


000697	Bannow Bay SAC	<ul> <li>[1130] Estuaries</li> <li>[1140] Tidal Mudflats and Sandflats</li> <li>[1210] Annual Vegetation of Drift Lines</li> <li>[1220] Perennial Vegetation of Stony Banks</li> <li>[1310] Salicornia Mud</li> <li>[1330] Atlantic Salt Meadows</li> <li>[1410] Mediterranean Salt Meadows</li> <li>[1420] Halophilous Scrub</li> <li>[2110] Embryonic Shifting Dunes</li> <li>[2120] Marram Dunes (White Dunes)</li> <li>[2130] Fixed Dunes (Grey Dunes)*</li> </ul>	Within the 15km buffer
000781	Slaney River Valley SAC	<ul> <li>[1130] Estuaries</li> <li>[1140] Tidal Mudflats and Sandflats</li> <li>[1330] Atlantic salt meadows (<i>Glauco-Puccinel-lietalia maritimae</i>)</li> <li>[1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</li> <li>[3260] Floating River Vegetation</li> <li>[91A0] Old Oak Woodlands</li> <li>[91E0] Alluvial Forests*</li> <li>[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)</li> <li>[1095] Sea Lamprey (<i>Petromyzon marinus</i>)</li> <li>[1096] Brook Lamprey (<i>Lampetra planeri</i>)</li> <li>[1099] River Lamprey (<i>Lampetra fluviatilis</i>)</li> <li>[1103] Twaite Shad (<i>Alosa fallax</i>)</li> <li>[1106] Atlantic Salmon (<i>Salmo salar</i>)</li> <li>[1355] Otter (<i>Lutra lutra</i>)</li> <li>[1365] Common (Harbour) Seal (<i>Phoca vitulina</i>)</li> </ul>	Within the 15km buffer
		Special Protection Areas (SPA)	
004233	River Nore SPA	- [A229] Kingfisher ( <i>Alcedo atthis</i> )	Within Co. Kil- kenny
004027	Tramore Back Strand SPA	<ul> <li>[A046] Brent Goose (<i>Branta bernicla hrota</i>)</li> <li>[A140] Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>[A141] Grey Plover (<i>Pluvialis squatarola</i>)</li> <li>[A142] Lapwing (<i>Vanellus vanellus</i>)</li> <li>[A149] Dunlin (<i>Calidris alpina alpine</i>)</li> <li>[A156] Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>[A157] Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> <li>[A160] Curlew (<i>Numenius arquata</i>)</li> <li>[A999] Wetlands</li> </ul>	Within the 15km buffer
004033	Bannow Bay SPA	<ul> <li>[A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)</li> <li>[A048] Shelduck (<i>Tadorna tadorna</i>)</li> <li>[A054] Pintail (<i>Anas acuta</i>)</li> <li>[A130] Oystercatcher (<i>Haematopus ostralegus</i>)</li> <li>[A140] Golden Plover (<i>Pluvialis apricaria</i>)</li> <li>[A141] Grey Plover (<i>Pluvialis squatarola</i>)</li> <li>[A142] Lapwing (<i>Vanellus vanellus</i>)</li> <li>[A143] Knot (<i>Calidris canutus</i>)</li> <li>[A149] Dunlin (<i>Calidris alpine</i>)</li> </ul>	Within the 15km buffer



		<ul> <li>[A156] Black-tailed Godwit (<i>Limosa limosa</i>)</li> <li>[A157] Bar-tailed Godwit (<i>Limosa lapponica</i>)</li> <li>[A160] Curlew (<i>Numenius arquata</i>)</li> <li>[A162] Redshank (<i>Tringa totanus</i>)</li> <li>[A999] Wetlands</li> </ul>	
004193	Mid-Waterford Coast SPA	<ul> <li>[A017] Cormorant (Phalacrocorax carbo)</li> <li>[A103] Peregrine (Falco peregrinus)</li> <li>[A184] Herring Gull (Larus argentatus)</li> <li>[A346] Chough (Pyrrhocorax pyrrhocorax)</li> </ul>	Within the 15km buffer





### 2.3 Assessment of Significance of Potential Impacts

The potential for significant impacts resulting from the Kilkenny County Council Draft Climate Change Adaptation Strategy has been assessed in relation to Natura 2000 sites within the precautionary zone of potential impact.

Impacts that require consideration are categorised under the following headings, as outlined in Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2001).

- Habitat loss or alteration;
- Habitat / species fragmentation;
- Disturbance and / or displacement of species;
- Changes in population density; and
- Changes in water quality and resource.

Following assessment, it is considered that the Draft Climate Change Adaptation Strategy will not result in any significant effects on any Natura 2000 sites.

Kilkenny County Council Draft Climate Change Adaptation Strategy is designed to inform responses throughout the local authority to the effects of climate change and does not identify specific areas for development. Any future projects resulting from the objectives laid out in the Strategy will need to comply with the relative legislation in relation to Appropriate Assessment, where appropriate.

#### 2.3.1 In-combination Effects

The following planning and policy documents were reviewed and considered for possible incombination effects with the proposed Plan:

- Kilkenny County Development Plan 2014 2020; and
- Kilkenny Biodiversity Action Plan.

# 3 CONCLUSION

In conclusion, upon the examination, analysis and evaluation of the relevant information including, in particular, the nature of the Draft Climate Change Adaptation Strategy and the likelihood of significant effects on any Natura 2000 site, in addition to considering possible incombination effects, and applying the precautionary principles, it is concluded by the authors of this report that, on the basis of objective information, the possibility may be excluded that the Draft Strategy will have a significant effect on any of the Natura 2000 sites within the Kilkenny County Council area or precautionary buffer zone.



## 4 **REFERENCES**

DEHLG. (2010). Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Autorities. Department of Environment, Heritage and Local Government.

DHPLG. (2018). River Basin Management Plan for Ireland 2018-2021. Department of Housing, Planning and Local Government.

Environmental Protection Agency. (2002). Guidelines on information to be contained in Environmental Impact Statements. Environmental Protection Agency, Ireland.

Environmental Protection Agency. (2017). Guidelines on information to be contained in Environmental Impact Assessment Reports (Draft). Environmental Protection Agency, Ireland.

European Commission. (2001). Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Communities, Luxembourg.

Fossitt, J. A. (2000). A Guide to Habitats in Ireland. Kilkenny: The Heritage Council.

Franklin, A. N. (2002). What is Habitat Fragmentation? Studies in Avian Biology, 20-29.

Kuikena, T., Bennetta, P., Allchinb, R., Kirkwood, J.,Baker, J., Lockyer, C., Walton, M., Sheldrick, M. (1994). PCBs, cause of death and body condition in harbour porpoises (*Phocoena phocoena*) from British waters. Aquatic Toxicology, Vol: 28, Issue: 1, Page: 13-28.

NBDC (2018). National Biodiversity Data Centre online mapping [ONLINE] Available at: http://maps.biodiversityireland.ie/Map.aspx. [Accessed April 2019].

NPWS (2010). Circular NPW 1/10 & PSSP 2/10. Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Department of Environment, Heritage and Local Government.

NPWS (2018). Generic Conservation Objectives. Version 6.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Parnell, J: Curtis, T; and Cullen, E. (2012). Webb's an Irish Flora. Hardback, 8th Ed. (March 2012), Trinity College Dublin.

Reid, N., Hayden, B., Lundy, M.G., Pietravalle, S., McDonald, R.A. & Montgomery, W.I. (2013) National Otter Survey of Ireland 2010/12. Irish Wildlife Manuals No. 76. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

Smith, G.F., O'Donoghue, P, O'Hora K., and Delaney, E. (2010). Best Practice Guidance for Habitat Survey and Mapping. Published by the Heritage Council.

