APPROPRIATE ASSESSMENT SCREENING REPORT

FOR

DRAFT CLIMATE CHANGE ADAPTION STRATEGY FOR MEATH COUNTY COUNCIL

June 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.

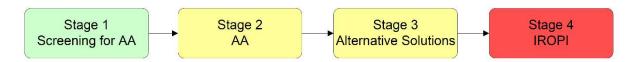


FIGURE 1. THE FOUR STAGES OF THE APPROPRIATE ASSESSMENT PROCESS (DEHLG, 2010).

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 Meath 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 Meath 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:

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

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, frequently, constantly – or hourly, daily, weekly, monthly, annually)

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 environment but without significant consequences.
Slight Effects	An effect which causes noticeable changes in the character of the environment 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

Meath County Council's Draft Climate Change Adaption is not directly connected with or necessary for the management of Natura 2000 sites in County Meath 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 2015.¹

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 Meath 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, Meath County Council has set out a number of key objectives in their strategy, under eight thematic principles. The eight themes are listed below:

- 1. Economy
- 2. Mobility
- 3. Built Environment
- 4. Clean Energy

¹ Climate Action and Low Carbon Development Act 2015 (S.I. No. 25/2016).



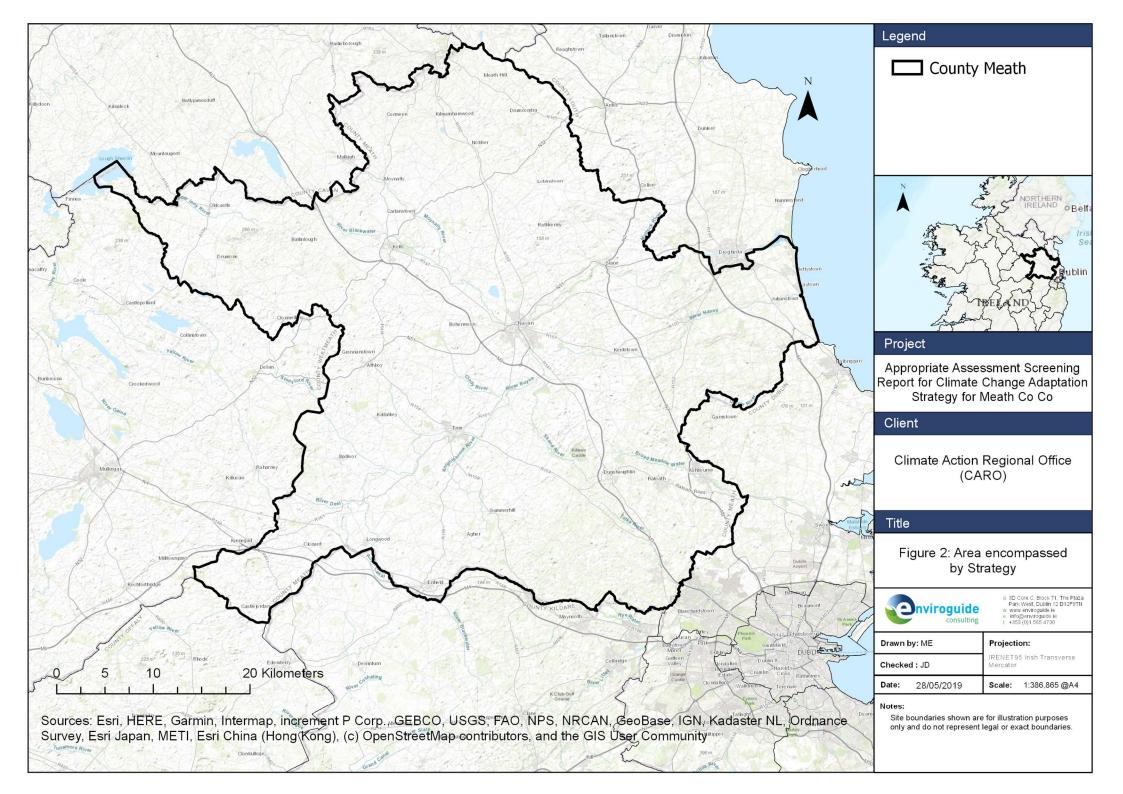
- 5. Resource Management
- 6. Water
- 7. Natural Resources
- 8. Planning

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

TABLE 3. MEATH COUNTY COUNCIL DRAFT CLIMATE CHANGE ADAPTATION STRATEGY OBJECTIVES

Th	Theme 1: Economy					
1	To use Climate Action as a driver for growth in County Meath					
2	To promote and market County Meath as a Climate Ready region					
3	To promote local jobs and local workspaces					
Th	eme 2: Mobility					
1	To increase the efficiency of the transport system					
2	To explore policies to help the transition to a climate resilient low carbon society, with emphasis on transportation modes and types					
3	To promote and encourage active transport.					
Th	eme 3: Built Environment					
1	To ensure that climate adaptation is mainstreamed into all activities and operations.					
2	To ensure that climate resilience is considered for all council-lead developments					
Th	eme 4: Clean Energy					
_	Encourage robust evidence based approached to inform policy and decision making in relation					
1	to the promotion of clean energies.					
2	Support and encourage communities in their pursuit of sustainable energy capacity building.					
Th	eme 5: Resource Management					
1	Continue to inspire communities to sustainably manage waste					
Th	eme 6: Water					
1	To liaise and work with other bodies, agencies responsible for the management of water courses					
2	To provide for adequate and quality water supply in times of extreme weather conditions					
Th	eme 7: Natural Resources					
1	To liaise and collaborate with the agricultural community in their pursuit of climate resilience.					
	To promote and encourage the use of natural resources to help us mitigate and adapt to climate					
2	change					
3	To use natural resources to mitigate and adapt to climate change					
4	To build capacity and resilience within communities					
Th	Theme 8: Planning					
1	To promote and integrate climate action policy into all regional and local planning policies					
2	To integrate climate action considerations into landuse planning policy					
3	To promote and maximize the most efficient and sustainable use of land					
4	•					
5						
1 2 3 4	To promote and integrate climate action policy into all regional and local planning policies To integrate climate action considerations into landuse planning policy					





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 26 SACs and 17 SPAs are found, each site name, corresponding code and qualifying interests are detailed in Table 4 below.

TABLE 4. NATURA 2000 SITES WITHIN A 15KM RADIUS OF THE STRATEGY AREA.

* = PRIORITY; NUMBERS IN BRACKETS ARE NATURA 2000 CODES

Site Code	Site Name	Qualifying Interests	Location			
	Special Areas of Conservation (SAC)					
002299	River Boyne And River Blackwater SAC	 [7230] Alkaline Fens [91E0] Alluvial Forests* [1099] River Lamprey (<i>Lampetra fluviatilis</i>) [1106] Atlantic Salmon (<i>Salmo salar</i>) [1355] Otter (<i>Lutra lutra</i>) 	Within Co. Meath			
000006	Killyconny Bog (Clogh- bally)	- 7110] Raised Bog (Active)* - [7120] Degraded Raised Bog	Within Co. Meath			
001398	Rye Water Valley/Carton SAC	 [7220] Petrifying Springs* [1014] Narrow-mouthed Whorl Snail (Vertigo angustior) [1016] Desmoulin's Whorl Snail (Vertigo moulinsiana) 	Within Co. Meath			
001957	Boyne Coast And Estu- ary SAC	 [1130] Estuaries [1140] Tidal Mudflats and Sandflats [1210] Annual vegetation of drift lines [1310] Salicornia Mud [1330] Atlantic Salt Meadows [2110] Embryonic Shifting Dunes [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)* 	Within Co. Meath			
002340	Moneybeg And Clareis- land Bogs SAC	 [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation 	Within Co. Meath			
001810	White Lough, Ben Loughs and Lough Doo SAC	 [3140] Hard Water Lakes [1092] White-clawed Crayfish (Austropotamobius pallipes) 	Within Co. Meath			
002120	Lough Bane And Lough Glass SAC	 [3140] Hard Water Lakes [1092] White-clawed Crayfish (Austropotamobius pallipes) 	Within Co. Meath			
002203	Girley (Drewstown) Bog SAC	- [7120] Degraded Raised Bog	Within Co. Meath			



		T	T
002342	Mount Hevey Bog SAC	 [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation 	Within Co. Meath
000199	Baldoyle Bay SAC	 [1140] Tidal Mudflats and Sandflats [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows 	Within the 15km buffer
003000	Rockabill to Dalkey Island SAC	- [1170] Reefs - [1351] Harbour Porpoise (Phocoena phocoena)	Within the 15km buffer
002205	Wooddown Bog SAC	- [7120] Degraded Raised Bog	Within the 15km buffer
000206	North Dublin Bay SAC	 [1140] Tidal Mudflats and Sandflats [1210] Annual Vegetation of Drift Lines [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2110] Embryonic Shifting Dunes [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)* [2190] Humid Dune Slacks [1395] Petalwort (Petalophyllum ralfsii) 	Within the 15km buffer
000455	Dundalk Bay SAC	 [1130] Estuaries [1140] Tidal Mudflats and Sandflats [1220] Perennial Vegetation of Stony Banks [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows 	Within the 15km buffer
002201	Derragh Bog SAC	- [7120] Degraded Raised Bog - [91D0] Bog Woodland*	Within the 15km buffer
002341	Ardagullion Bog SAC	 [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation 	Within the 15km buffer
002121	Lough Lene SAC	[3140] Hard Water Lakes[1092] White-clawed Crayfish (Austropotamobius pallipes)	Within the 15km buffer
000679	Garriskil Bog SAC	 [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation 	Within the 15km buffer
000582	Raheenmore Bog SAC	 [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation 	Within the 15km buffer
001387	Ballynafagh Lake SAC	 [7230] Alkaline Fens [1016] Desmoulin's Whorl Snail (Vertigo moulinsiana) [1065] Marsh Fritillary (Euphydryas aurinia) 	Within the 15km buffer



000925	The Long Derries, Edenderry SAC	- [6210] Orchid-rich Calcareous Grassland*	Within the 15km buffer
000391	Ballynafagh Bog SAC	 [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation) 	Within the 15km buffer
000685	Lough Ennell SAC	- [7230] Alkaline Fens	Within the 15km buffer
001459	Clogher Head SAC	- [1230] Vegetated Sea Cliffs - [4030] Dry Heath	Within the 15km buffer
000205	Malahide Estuary SAC	 [1140] Tidal Mudflats and Sandflats [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)* 	Within the 15km buffer
000208	Rogerstown Estuary SAC	 [1130] Estuaries [1140] Tidal Mudflats and Sandflats [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)* 	Within the 15km buffer
		Special Protection Areas (SPA)	
004065	Lough Sheelin SPA	 [A005] Great Crested Grebe (Podiceps cristatus) [A059] Pochard (Aythya farina) [A061] Tufted Duck (Aythya fuligula) [A067] Goldeneye (Bucephala clangula) 	Within Co. Meath
004080	Boyne Estuary SPA	 [A048] Shelduck (<i>Tadorna tadorna</i>) [A130] Oystercatcher (<i>Haematopus ostralegus</i>) [A140] Golden Plover (<i>Pluvialis apricaria</i>) [A141] Grey Plover (<i>Pluvialis squatarola</i>) [A142] Lapwing (<i>Vanellus vanellus</i>) [A143] Knot (<i>Calidris canutus</i>) [A144] Sanderling (<i>Calidris alba</i>) [A156] Black-tailed Godwit (<i>Limosa limosa</i>) [A162] Redshank (<i>Tringa tetanus</i>) [A169] Turnstone (<i>Arenaria interpres</i>) [A195] Little Tern (<i>Sterna albifrons</i>) [A999] Wetlands and Waterbirds 	Within Co. Meath
004232	River Boyne and River Blackwater SPA	- [A229] Kingfisher (<i>Alcedo atthis</i>)	Within Co. Meath
004158	River Nanny Estuary and Shore SPA	 [A130] Oystercatcher (<i>Haematopus ostralegus</i>) [A137] Ringed Plover (<i>Charadrius hiaticula</i>) [A140] Golden Plover (<i>Pluvialis apricaria</i>) 	Within Co. Meath



		 [A143] Knot (Calidris canutus) [A144] Sanderling (Calidris alba) [A184] Herring Gull (Larus argentatus) [A999] Wetlands 	
004091	Stabannan-Bra- ganstown SPA	- [A043] Greylag Goose (Anser anser)	Within the 15km buffer
004043	Lough Derravaragh SPA	 [A038] Whooper Swan (Cygnus cygnus) [A059] Pochard (Aythya farina) [A061] Tufted Duck (Aythya fuligula) [A125] Coot (Fulica atra) 	Within the 15km buffer
004102	Garriskil Bog SPA	- [A395] Greenland White-fronted Goose (Anser albifrons flavirostris)	Within the 15km buffer
004006	North Bull Island SPA	 [A046] Brent Goose (Branta bernicla hrota) [A048] Shelduck (Tadorna tadorna) [A052] Teal (Anas crecca) [A054] Pintail (Anas acuta) [A056] Shoveler (Anas clypeata) [A130] Oystercatcher (Haematopus ostralegus) [A140] Golden Plover (Pluvialis apricaria) [A141] Grey Plover (Pluvialis squatarola) [A143] Knot (Calidris canutus) [A144] Sanderling (Calidris alba) [A149] Dunlin (Calidris alpina alpine) [A156] Black-tailed Godwit (Limosa limosa) [A157] Bar-tailed Godwit (Limosa lapponica) [A160] Curlew (Numenius arquata) [A162] Redshank (Tringa tetanus) [A169] Turnstone (Arenaria interpres) [A179] Black-headed Gull (Chroicocephalus ridibundus) [A999] Wetlands 	Within the 15km buffer
004025	Malahide Estuary SPA	 [A005] Great Crested Grebe (Podiceps cristatus) [A046] Light-bellied Brent Goose (Branta bernicla hrota) [A048] Shelduck (Tadorna tadorna) [A054] Pintail (Anas acuta) [A067] Goldeneye (Bucephala clangula) [A069] Red-breasted Merganser (Mergus serrator) [A130] Oystercatcher (Haematopus ostralegus) [A140] Golden Plover (Pluvialis apricaria) [A141] Grey Plover (Pluvialis squatarola) [A143] Knot (Calidris canutus) [A149] Dunlin (Calidris alpina) [A156] Black-tailed Godwit (Limosa limosa) [A157] Bar-tailed Godwit (Limosa lapponica) [A162] Redshank (Tringa totanus) [A999] Wetland and Waterbirds 	Within the 15km buffer
004122	Skerries Islands SPA	- [A017] Cormorant (<i>Phalacrocorax carbo</i>) - [A018] Shag (<i>Phalacrocorax aristotelis</i>)	Within the 15km buffer

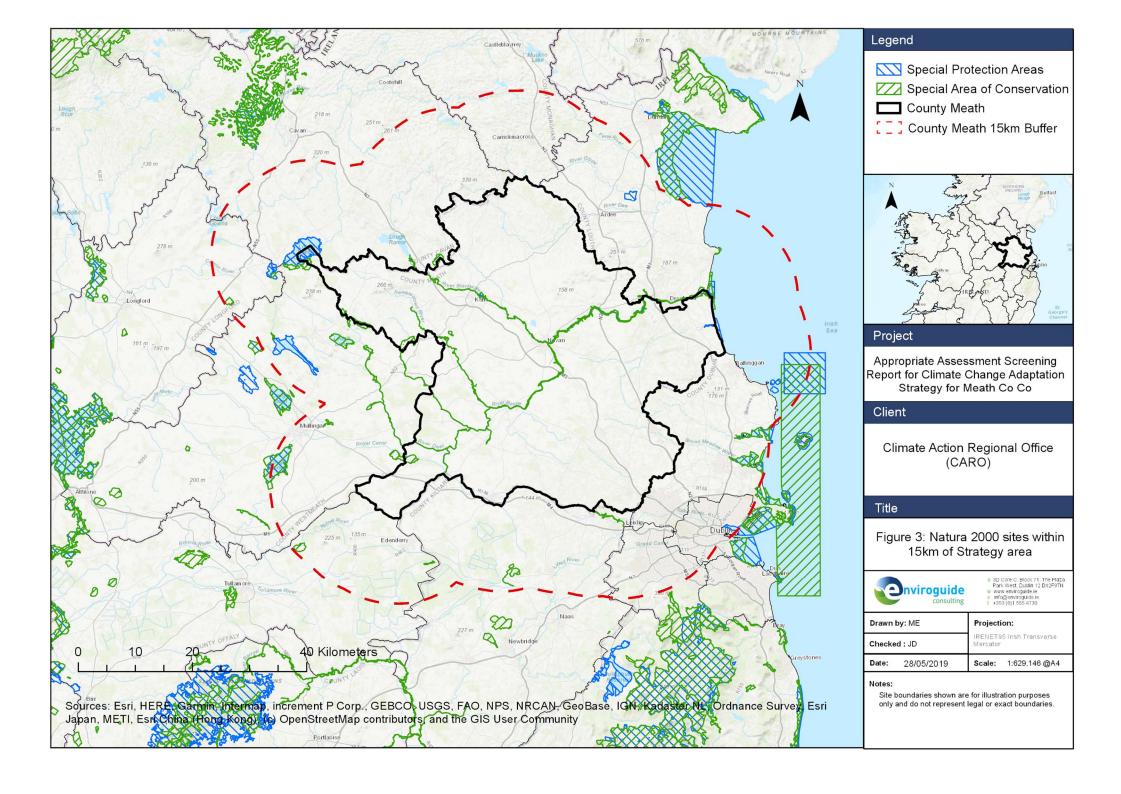


		 [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A148] Purple Sandpiper (<i>Calidris maritima</i>) [A169] Turnstone (<i>Arenaria interpres</i>) [A184] Herring Gull (<i>Larus argentatus</i>) 	
004014	Rockabill SPA	 [A148] Purple Sandpiper (Calidris maritima) [A192] Roseate Tern (Sterna dougallii) [A193] Common Tern (Sterna hirundo) [A194] Arctic Tern (Sterna paradisaea) 	Within the 15km buffer
004015	Rogerstown Estuary SPA	 [A043] Greylag Goose (Anser anser) [A046] Light-bellied Brent Goose (Branta bernicla hrota) [A048] Shelduck (Tadorna tadorna) [A056] Shoveler (Anas clypeata) [A130] Oystercatcher (Haematopus ostralegus) [A137] Ringed Plover (Charadrius hiaticula) [A141] Grey Plover (Pluvialis squatarola) [A143] Knot (Calidris canutus) [A149] Dunlin (Calidris alpina) [A156] Black-tailed Godwit (Limosa limosa) [A162] Redshank (Tringa totanus) [A999] Wetland and Waterbirds 	Within the 15km buffer
004016	Baldoyle Bay SPA	 [A046] Light-bellied Brent Goose (Branta bernicla hrota) [A048] Shelduck (Tadorna tadorna) [A137] Ringed Plover (Charadrius hiaticula) [A140] Golden Plover (Pluvialis apricaria) [A141] Grey Plover (Pluvialis squatarola) [A157] Bar-tailed Godwit (Limosa lapponica) [A999] Wetland and Waterbirds 	Within the 15km buffer
004024	South Dublin Bay and River Tolka Estuary SPA	 [A046] Light-bellied Brent Goose (Branta bernicla hrota) [A130] Oystercatcher (Haematopus ostralegus) [A137] Ringed Plover (Charadrius hiaticula) [A141] Grey Plover (Pluvialis squatarola) [A143] Knot (Calidris canutus) [A144] Sanderling (Calidris alba) [A149] Dunlin (Calidris alpina) [A157] Bar-tailed Godwit (Limosa lapponica) [A162] Redshank (Tringa totanus) [A179] Black-headed Gull (Chroicocephalus ridibundus) [A192] Roseate Tern (Sterna dougallii) [A193] Common Tern (Sterna hirundo) [A194] Arctic Tern (Sterna paradisaea) Wetland and Waterbirds [A999] 	Within the 15km buffer
004026	Dundalk Bay SPA	 [A005] Great Crested Grebe (Podiceps cristatus) [A043] Greylag Goose (Anser anser) [A046] Light-bellied Brent Goose (Branta bernicla hrota) [A048] Shelduck (Tadorna tadorna) 	Within the 15km buffer



- [A052] Teal (Anas crecca) - [A053] Mallard (Anas platyrhynchos) - [A054] Pintali (Anas acuta) - [A065] Common Scoter (Melanitta nigra) - [A069] Red-breasted Merganser (Mergus serrator) - [A130] Oystercatcher (Haematopus ostralegus) - [A137] Ringed Plover (Charadrius hiaticula) - [A140] Golden Plover (Pluvialis apricaria) - [A141] Grey Plover (Pluvialis apricaria) - [A142] Lapwing (Vanellus vanellus) - [A143] Knot (Calidris canutus) - [A149] Dunlin (Calidris alpine) - [A156] Black-tailed Godwit (Limosa limosa) - [A157] Bar-tailed Godwit (Limosa lapponica) - [A160] Curlew (Numenius arquata) - [A162] Redshank (Tringa tetanus) - [A152] Redshank (Tringa tetanus) - [A152] Common Gull (Larus canus) - [A182] Common Gull (Larus argentatus) - [A182] Common Gull (Larus argentatus) - [A184] Herring Gull (Larus argentatus) - [A999] Wetlands & Waterbirds - [A059] Pochard (Aythya ferina) - [A061] Tufted Duck (Aythya fuligula) - [A125] Coot (Fulica atra) - [A999] Wetland and Waterbirds - [A059] Pochard (Aythya ferina) - [A999] Wetland and Waterbirds - [A059] Pochard (Aythya ferina) - [A061] Tufted Duck (Aythya ferina) - [A999] Wetland and Waterbirds				
- [A061] Tufted Duck (Aythya fuligula) - [A125] Coot (Fulica atra) - [A999] Wetland and Waterbirds Uough Kinale and Deragah Country (Aythya ferina) - [A059] Pochard (Aythya ferina) - [A059] Pochard (Aythya ferina) - [A061] Tufted Duck (Aythya fuligula) Within the 15km buffer			 [A053] Mallard (Anas platyrhynchos) [A054] Pintail (Anas acuta) [A065] Common Scoter (Melanitta nigra) [A069] Red-breasted Merganser (Mergus serrator) [A130] Oystercatcher (Haematopus ostralegus) [A137] Ringed Plover (Charadrius hiaticula) [A140] Golden Plover (Pluvialis apricaria) [A141] Grey Plover (Pluvialis squatarola) [A142] Lapwing (Vanellus vanellus) [A143] Knot (Calidris canutus) [A149] Dunlin (Calidris alpine) [A156] Black-tailed Godwit (Limosa limosa) [A157] Bar-tailed Godwit (Limosa lapponica) [A160] Curlew (Numenius arquata) [A162] Redshank (Tringa tetanus) [A179] Black-headed Gull (Chroicocephalus ridibundus) [A182] Common Gull (Larus canus) [A184] Herring Gull (Larus argentatus) 	
004061 ragh Lough SPA - [A061] Tufted Duck (Aythya fuligula) Within the	004044	Lough Ennell SPA	[A061] Tufted Duck (Aythya fuligula)[A125] Coot (Fulica atra)	
	004061		- [A061] Tufted Duck (Aythya fuligula)	





2.3 Assessment of Significance of Potential Impacts

The potential for significant impacts resulting from the Meath 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.

Meath 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:

- Meath County Development Plan 2013 2019;
- Meath's Heritage Plan 2015 2020; and
- County Meath Biodiversity Action Plan 2008 2012.

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 Meath County Council area or precautionary buffer zone.



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