



COUNTY MEATH HERITAGE PLAN 2015-2020

Habitats Directive Appropriate Assessment Screening Report

April 2015



TABLE OF CONTENTS

1	Introduction	
1.1	Background	2
1.2	Screening for Appropriate Assessment: Purpose and Process	2
1.3	Guidance documentation	3
1.4	Data Sources	4
2	Stage 1 - Screening For Appropriate Assessment	
2.1	Overview of County Meath Heritage Plan 2015-2020	5
2.2	Timing of Screening in the Heritage Plan process	6
2.3	Brief Description of Natura 2000 sites	6
2.4	Reasons for Designation; Qualifying interest, Site Sensitivities and Threats	7
2.5	Identification of Potential Likely Significant Effects	12
2.6	Conservation Objectives	12
2.7	Screening Conclusions	31
	Appendix A	
	Qualifying Interests and Threats to Key Conditions for Natura 2000 sites	32

1.1. Background

This Screening Report provides information on and assesses the potential for the *County Heritage Plan 2015-2020* to impact on sites of European-scale ecological importance and is published alongside the County Meath Heritage Plan 2015-2020 and serves as a documented record of the process of the Appropriate Assessment of the Plan throughout its preparation.

The preparation of the County Heritage Plan has regard to Article 6 of the *Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (as amended) (hereafter referred to as the Habitats Directive). This is transposed in Ireland by the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. 477) (hereafter referred to as the Habitats Regulations).

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to affect Natura 2000 sites.

Article 6(3) establishes the requirement to screen all plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)):

Article 6(3): “Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

The subsequent paragraph allows proposed plans and projects to be approved in certain conditions.

Article 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, Member States shall take all compensatory measures necessary to ensure that the overall coherence of the 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 the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

This Habitats Directive Screening Report is a documentary record of the Appropriate Assessment process for the County Meath Heritage Plan 2015-2020.

1.2. Screening for Appropriate Assessment: Purpose and Process

The County Meath Heritage Forum, facilitated by Meath County Council, has prepared the County Meath Heritage Plan 2015-2020. This Plan aims to identify priorities for action, establish a framework for the management of heritage at local level and increase awareness, appreciation and

enjoyment of our heritage for all. The preparation of the Plan was guided by *A Methodology for Local Authority Heritage Officers on the Preparation of County/City Heritage Plans* produced by the Heritage Council in 2003. Screening has been undertaken in fulfilment of the requirements of the Habitats Directive and the European Communities (Birds and Natural Habitats) Regulations, 2011 and in accordance with government guidance.

All plans or projects must be screened for their potential impact on sites that are designated for their special habitats and wildlife. These particular sites are regarded to be of European importance and are part of the European Commission's Natura 2000 network of sites. They are termed candidate Special Areas of Conservation (cSAC) under the E.C. Habitats Directive and Special Protection Areas (SPA) under the E.C. Birds Directive. The Irish Government and local planning authorities have a legal obligation to protect these sites.

The process of assessing the County Heritage Plan was a structured exercise with a series of steps. The overall purpose of the process was to ensure that the Heritage Plan, when implemented, does not result in adverse effects on the "integrity" of these Natura 2000 sites. The overall process is termed "Appropriate Assessment", using the terms set out in the EC Habitats Directive Article 6(3).

Screening for appropriate assessment has been undertaken in accordance with *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, 2010 revision) and comprises the following steps:

1. Description of the Plan and the plan area characteristics
2. Identification of NATURA 2000 sites and information in their qualifying interests and conservation objectives
3. Assessment of the likely effects – direct, indirect and cumulative - of the implementation of the County Meath Heritage Plan 2015-2020
4. Screening statement conclusions

The purpose of screening for appropriate assessment is to look at the overall County Heritage Plan and to answer the questions: is it likely that the implementation of this Plan could result in likely significant effects on Natura 2000 sites? If the screening stage results in a judgment that likely significant effects may occur or cannot be ruled out then a more detailed 'Appropriate Assessment' (AA) is required.

1 3 Guidance documentation

The Screening Statement took account of guidance contained in the following documents:

- *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 & PSSP 2/10.
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article 6 Guidance Document. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive.

- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (EC Environment Directorate-General, 2000); hereafter referred to as MN2000.
- *Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence.* Opinion of the European Commission (European Commission, January 2007).
- *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)

1.4 Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites relied upon are listed below:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie and Google Earth (accessed on dates from October 2011 to April 2012).
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie
 - Natura 2000 network Data Form
 - Online database of rare, threatened and protected species
 - Publicly accessible biodiversity datasets
- Information on water quality in the area available from www.epa.ie
- Information on the River Basin Districts from www.wfdireland.ie
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie
- *Status of EU Protected Habitats in Ireland.* (National Parks & Wildlife Service, 2013)
- County Meath Tree, Woodland & Hedgerow Survey 2011
- County Meath Wetlands and Coastal Habitats Survey, August 2010
- Coastal Monitoring Project 2004-2006. (2009) Report for NPWS. http://www.npws.ie/publications/archive/Ryle_et_al_2009_Coastal_Monitoring_Project_-1.pdf

2. STAGE 1 - SCREENING FOR APPROPRIATE ASSESSMENT

2.1. Overview of County Meath Heritage Plan 2015-2020

County Meath (*na Mí*), with an area of 2,342 km² and a population of 184,135 inhabitants (CSO, 2011), is situated in the east midlands of Ireland, in the Province of Leinster. It stretches from a 10 kilometre long east coast strip between the Boyne and Delvin rivers as far inland as Lough Sheelin. Apart from the coastal strip it is bounded on the east by county Dublin, on the south by counties Kildare and Offaly, on the west by county Westmeath and on the north by counties Cavan, Monaghan and Louth.

The largest river within the county is the River Boyne and the importance of this river system is recognised by the fact that it has been designated a Special Area of Conservation (SAC) and a Special Protection Area (SPA). Meath also contains some important lakes such as the White Lough, Ben Loughs and Lough Doo complex, and in the west of the county there are areas of degraded raised bog and small areas of active raised bog such as a section of the Moneybeg raised bog SAC.

Heritage gives each town, village and rural area in Meath its character and local distinctiveness which contributes to a strong sense of place and an immense source of pride for its people and communities. A positive approach to heritage management enhances quality of life and environmental sustainability and will ensure that our cultural and natural heritage is a resource that helps the county to compete as a cultural tourism destination and as a location of choice for inward investment.

The County Heritage Forum has prepared the County Meath Heritage Plan 2015-2020 in consultation with the people of the county and local, regional and national organisations with an interest in the heritage of Meath. The plan aims to identify priorities for action, establish a framework for the management of heritage at local level and increase awareness, appreciation and enjoyment of our heritage for all. It sets out 53 actions to be undertaken over a 6 year period in relation to Meath's natural and cultural heritage under the following **six strategic themes**:

- Strategic Theme 1: Increase our understanding of Meath's heritage through awareness, education and training
- Strategic Theme 2: Disseminate existing heritage data and information to a wide audience and undertake surveys/research where information gaps exist
- Strategic Theme 3: Promote best practice in the conservation and management of Meath's heritage assets
- Strategic Theme 4: Work in partnership with local communities and other key stakeholders to actively engage with, enjoy and care for our heritage
- Strategic Theme 5: Promote heritage as a resource to contribute to quality of life, and cultural and economic development in Meath
- Strategic Theme 6: Mainstream heritage within the Local Authority and seek the appointment of heritage professionals to support the delivery of an integrated heritage service

The plan comprises of the following:

Part 1 - setting out the value of Meath's cultural and natural heritage assets

- Relationship between Heritage Plan and County Development Plan
- The scope of the County Meath Heritage Plan
- Guiding principles
- Overview of Meath Heritage Plan 2007-2011

Part 2 - Preparing the County Meath Heritage Plan 2015-2020 Part 3 -

outlines the themes and actions

Part 4 - gives an overview on how the plan will be implemented

The appendices set out the membership of the County Heritage Forum, detailed timetable of plan process, pre-draft and draft public consultation process, selected achievements of County Meath Heritage Plan 2007-2011, relevant legislation and useful contacts/information.

2.2. Timing of Screening in the Heritage Plan process

There is no legal requirement as to when the screening of any plan for likely significant effects should take place. Good practice agreed amongst AA professionals is that it should be a relatively brief stage at the beginning of the plan review process. Its aim is to decide if the plan needs to be taken forward to a more detailed level of assessment (Stage 2: Appropriate Assessment or AA) and which Natura 2000 sites may be potentially affected. Screening is not the same as an AA – it only requires sufficient information to decide if a significant effect is likely. An AA goes into more detail to test whether those effects could result in damage to the European site.

If, based upon the currently available information, there are aspects of the Heritage Plan that could affect the Natura 2000 sites then they will require further analysis in the form of a Stage 2: Appropriate Assessment.

2.3. Brief Description of NATURA 2000 sites

In accordance with the Department of Environment, Heritage and Local Government guidance (DoEHLG, 2010), an initial distance of 15km from the County boundary was selected for consideration of Natura 2000 sites. This distance was deemed to be sufficient to cover all likely significant effects which may arise from the implementation of the County Heritage Plan on Natura 2000 sites. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website.

All Natura 2000 sites which fall within 15km of the County boundary are listed in Table 1 below. Table 2 lists the non-Natura 2000 sites.

Table 1: Natura 2000 sites found in County Meath and within 15km buffer zone.

Sites within County Meath	
Candidate Special Areas of Conservation	Special Protection Areas
Boyne Coast and Estuary	Boyne Estuary
River Boyne and Blackwater	River Nanny Estuary and Shore
Rye Water Valley / Carton	Lough Sheelin

Mount Hevey Bog	River Boyne and Blackwater
White Lough, Ben Loughs and Lough Doo	
Lough Bane and Lough Glass	
Killyconny Bog (Cloughbally)	
Monybeg and Clareisland Bogs	
Within 15km Buffer Zone	
Candidate Special Areas of Conservation	Special Protection Areas
Ardagullion Bog	Stabannan Braganstown
Garriskil Bog	North Bull Island
Lough Lene	(South Dublin Bay) Sandymount Strand / River Tolka Estuary
Lough Ennell	Baldoyle Bay
Raheenmore Bog	Rogerstown Estuary
The Long Derries, Edenderry	Skerries Islands
Ballynafagh Bog	(Malahide Estuary) Broadmeadow / Swords Estuary
Ballynafagh Lake	Dundalk Bay
North Dublin Bay	Lough Kinale and Derragh Lough
Baldoyle Bay	Garriskill Bog
Malahide Estuary	Lough Derraghvarragh
Rogerstown Estuary	Lough Ennell
Clogher Head	Rockabill
Dundalk Bay	
Rockabill to Dalkey Island	

The location of these sites are presented in Appendix I.

2.4. Reasons for Designation – Qualifying interests, Site Sensitivities and Threats

In order to identify those sites that could be potentially affected, it was necessary to describe the Natura 2000 site in the context of why it has been designated (i.e. its “Qualifying Interests”) and the environmental and ecological conditions that maintain the condition of these features. The Qualifying Interests and threats to the sites were extracted from the NPWS website database (www.npws.ie).

The results of this desktop exercise are presented in Appendix A and summarised below in Table 2. This presents the full list of qualifying interests that are contained within Natura 2000 sites in Meath. The underpinning conditions that are required to maintain the ‘health’ of these features are listed in this table.

Table 2: Qualifying Interests in County Meath and the underpinning environmental conditions.

Qualifying Interests	Key environmental conditions supporting site integrity
Active raised bog	Surface water supply. Low nutrient, acidic conditions to support growth of Sphagnum spp. Restricted drainage at perimeter.

Qualifying Interests	Key environmental conditions supporting site integrity
Alkaline fens	High water table. Ground surface water supply. Calcium-rich conditions.
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>)	Riparian/lacustrine habitat prone to flooding
Annual vegetation of drift lines	Sandy substrate. Physical impact and nutrient supply from tidal flow.
Arctic Tern (<i>Sterna paradisaea</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation.
Atlantic Salmon <i>Salmo salar</i>	Riverine habitat. Water quality (Q4-5). Riverbed breeding gravels. Quality riparian vegetation. Unhindered migratory routes.
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)	Frequency of tidal submergence
Bar-tailed Godwit (<i>Limosa lapponica</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	Food availability (intertidal fauna/pasture/sewage). Coastal water quality.
Black-tailed Godwit (<i>Limosa limosa</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Common Gull (<i>Larus canus</i>)	Marine prey availability. Wetland foraging area. Undisturbed roost site availability.
Common Scoter (<i>Melanitta nigra</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.
Common Tern (<i>Sterna hirundo</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel).
Coot (<i>Fulica atra</i>)	Food availability (aquatic flora and fauna). Undisturbed freshwater roosting sites close to feeding sites.
Curlew (<i>Numenius arquata</i>)	Food availability (interidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Degraded raised bogs still capable of natural regeneration	Dessication from drainage. Low moss cover.
Depressions on peat substrates of the Rhynchosporion	Peat cutting. Surface water supply.
Dunlin (<i>Calidris alpina</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.

Qualifying Interests	Key environmental conditions supporting site integrity
Embryonic shifting dunes	Dune-building grasses <i>Elytrigia juncea</i> and <i>Leymus arenarius</i> . Supply of windblown sand
Estuaries	Supply of riverine freshwater. Unimpeded tidal flow. Shelter from open coasts. Diverse invertebrate communities.
European dry heaths	Free-draining nutrient poor acid soils. Grazing and burning.
Fixed coastal dunes with herbaceous vegetation (grey dunes)	Low wind, weakly saline conditions in shelter of <i>Ammophila arenaria</i> dunes. Grazing.
Golden Plover (<i>Pluvialis apricaria</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Goldeneye (<i>Bucephala clangula</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.
Great Crested Grebe (<i>Podiceps cristatus</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.
Grey Plover (<i>Pluvialis squatarola</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Greylag Goose (<i>Anser anser</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.
Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp.	Calcium rich, shallow, low nutrient waters.
Herring Gull (<i>Larus argentatus</i>)	Coastal water quality.
Humid dune slacks	High water maintained by groundwater and impermeable soils. Grazing. Salinity.
Kingfisher (<i>Alcedo atthis</i>)	Marine/freshwater food availability. Undisturbed soft substrate riparian nest sites. Regularity of extreme weather. Water quality.
Lapwing (<i>Vanellus vanellus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.
Little Tern (<i>Sterna albifrons</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel).
Mallard (<i>Anas platyrhynchos</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation.
Marsh Fritillary <i>Euphydryas aurinia</i>	Larval foodplant <i>Succisa pratensis</i> . Grassland sward structure. Water supply for damp conditions.
Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Frequency of tidal submergence.
Merlin (<i>Falco columbarius</i>)	Moorland Prey availability. Undisturbed forested/moorland nest sites. Regularity of extreme weather. Water quality.
Mudflats and sandflats not	Silt deposits in sheltered estuaries.

Qualifying Interests	Key environmental conditions supporting site integrity
covered by seawater at low tide	
Otter <i>Lutra lutra</i>	Prey availability. Water Quality. Riparian vegetation for breeding sites. Unhindered passage along waterways.
Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Perennial vegetation of stony banks	Cobble substrate. Tidal levels. Sediment supply from wind and waves.
Petalwort <i>Petalophyllum ralfsii</i>	Lime-rich sandy habitat. Overgrazing. Fluctuating water table for damp conditions.
Petrifying springs with tufa formation (Cratoneurion)	Calcium-rich, nutrient-poor groundwater/surface water supply.
Pintail (<i>Anas acuta</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.
Pochard (<i>Aythya ferina</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.
Purple Sandpiper (<i>Calidris maritima</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Red-breasted Merganser (<i>Mergus serrator</i>)	Fish/crustacean prey availability in shallow inshore waters. Undisturbed, ice-free marine/freshwater feeding grounds.
Redshank (<i>Tringa totanus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Ringed Plover (<i>Charadrius hiaticula</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
River Lamprey <i>Lampetra fluviatilis</i>	Riverine habitat. Water quality. Riverbed breeding gravels and silt nursery substrate. Unhindered migratory channels.
Roseate Tern (<i>Sterna dougallii</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation.
Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence. Absence of erosion.
Sanderling (<i>Calidris alba</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)(*important orchid sites)	Dry, shallow, calcium-rich nutrient-poor soils. Light grazing.
Shag (<i>Phalacrocorax aristotelis</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds and roosting sites.

Qualifying Interests	Key environmental conditions supporting site integrity
Shelduck (<i>Tadorna tadorna</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Supply of wind-blown sand.
Shoveler (<i>Anas clypeata</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Snipe (<i>Gallinago gallinago</i>)	Frequency of tidal submergence. Supply of mud sediment on seaward edge of saltmarsh.
Spartina swards (Spartinion maritimae)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.
Teal (<i>Anas crecca</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.
Tufted Duck (<i>Aythya fuligula</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.
Turnstone (<i>Arenaria interpres</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Vegetated sea cliffs of the Atlantic and Baltic coasts	Flat topography on coastal cliff bedrock. High pH influence of sands and seabird guano.
<i>Vertigo angustior</i>	Stable wetland water table. Emergent vegetation. Groundwater supply. Lime-rich conditions.
<i>Vertigo moulinsiana</i>	Stable wetland water table. Emergent vegetation. Groundwater supply. Lime-rich conditions.
White clawed Crayfish <i>Austropotamobius pallipes</i>	Well oxygenated lakes/rivers with high pH. Riparian/ lacustrine substrate of cobbles/submerged vegetation.
Whooper Swan (<i>Cygnus cygnus</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.

The key output of this stage was the identification of the types of threats to the integrity of the Natura 2000 sites. These can then be related to the consequences of implementing the County Heritage Plan 2015-2020 to see if there is a risk of any likely significant effects.

The following generic threats were identified:

Rural/Agricultural activities

- Agricultural Intensification;
- Fertilisation;
- Grazing, (undergrazing /overgrazing);
- Restructuring agricultural land holdings;
- Forestry (afforestation/deforestation);
- Stock Feeding;
- Drainage/flooding;
- Offshore/onshore aquaculture;

- Pesticides, and;
- Peat Extraction.

Economic and Infrastructural Development

- Golf Courses;
- Roads, motorways;
- Coastal protection works;
- Sewage outflows;
- Housing developments;
- Communications Networks;
- Quarries;
- Canalisation;
- Landfill land reclamation;
- Disposal of household waste;
- River Channel Maintenance, and;
- Invasive Alien Species.

Recreation and Leisure

- Walking, horse riding and non-motorised vehicles;
- Offshore motorised vehicles;
- Bait Digging, and;
- New Paths and Tracks.

2.5. Identification of Potential Likely Significant Effects

The County Heritage Plan aims to identify priorities for action, establish a framework for the management of heritage at local level and increase awareness, appreciation and enjoyment of our heritage for all. The actions set down in the County Heritage Plan 2015-2020 are principally focused on communicating the value of our heritage to improve awareness. It is not considered that any of the 53 actions will have a direct, indirect or cumulative impact on Natura 2000 sites. The actions will not result in any works which could impact Natura 2000 sites either directly, indirectly, or in combination with other plans and projects. A significant number of the actions relate to the collation of data and awareness/education activities which should enhance heritage awareness and protection. Table 3 below sets out each action of the County Heritage Plan 2015-2020.

2.6. Conservation Objectives

The E.C. Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. At the time of the preparation of the County Development Plan the National Parks and Wildlife Service had only prepared generic objectives for cSACs whilst there are more substantial Objectives prepared for some SPAs such as Dundalk Bay.

The generic objective for each cSAC is as follows:

“Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected”.

These Annex I habitats and Annex II species are listed in Appendix 1.

Conservation Objectives for the following sites are more explicit and relate to each of the qualifying interests. They can be found at:

Boyne Coast and Estuary cSAC (September 2012)

http://www.npws.ie/publications/archive/001957_Boyne%20Coast%20and%20Estuary%20SAC%20Marine%20Supporting%20Doc_V1.pdf

River Boyne and Blackwater cSAC (August 2012) Coastal Habitats

http://www.npws.ie/publications/archive/001957_Boyne%20Coast%20and%20Estuary%20SAC%20Coastal%20Supporting%20Doc_V1.pdf

Favourable Conservation status/condition is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is “favourable”.

“Favourable” is defined as:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long term basis.

Two of the SPAs within County Meath, Lough Sheelin SPA (004065) and the River Boyne and Blackwater SPA (004232) have the following generic objective:

“Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA”

However, the Boyne Estuary SPA (004080) has 12 specific objectives which can be found at:

<http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO004080.pdf>

Further, the River Nanny Estuary and Shore SPA (004158) has 7 specific objectives which can be found at:

<http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO004158.pdf>

Dundalk Bay SPA (March 2011)

<http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO004026.pdf>

Table 3 Assessment of likely significant effects of implementing the County Meath Heritage Plan 2015-2020

Strategic Theme 1: Increase our understanding of Meath’s heritage through awareness, education and training

No.	Action	Potential likely significant direct Impact to Natura 2000 sites	Potential likely significant indirect Impact to Natura 2000 sites	Potential likely significant cumulative impacts to Natura 2000 sites	Comment
1.1	Engage with the public to raise awareness and promote an understanding of the heritage and genealogical value of graveyards and their associated historic structures	None	None	None	This action will focus on raising awareness
1.2	Promote and facilitate the holding of an annual/biennial conference (drawing on international best practice) to deepen our understanding of all aspects of heritage at community, county and national level	None	None	None	Conference will at times on its programme relate to natural heritage and biodiversity
1.3	Establish a ‘Heritage Day’ in schools and develop a pilot project in each Municipal District in partnership with Navan Education Centre where a school is linked to a local heritage group to undertake a heritage project	None	None	None	This action will focus on engaging children with their local heritage
1.4	Engage with the public online to crowd source and identify the names of all the crossroads in the county	None	None	None	Online project to engage public participation
1.5	Develop a heritage education and awareness programme, in partnership with Navan	None	None	None	Relates to cultural heritage awareness

	Education Centre, aimed at primary and post primary pupils, teachers and the school community to include monuments in Meath studied as part of the Primary, Junior Cert and Leaving Cert curricula				
1.6	Develop and implement a Heritage Communications Strategy and Plan targeted at identified groups of stakeholders	None	None	None	Will raise awareness about the value of biodiversity value
1.7	Meath has the only recognised Gaeltacht in Leinster, in Ráth Chairn/Baile Ghib. Seek to enhance this unique community as a rich resource for the entire country, having regard to its linguistic, folkloric, cultural, heritage, educational, sociological and anthropological significance	None	None	None	
1.8	Develop an exhibition showcasing the geology of the county, to be displayed in the libraries around the county	None	None	None	
1.9	Undertake a project on the natural heritage of Holy Wells	None	None	None	
1.10	Raise awareness of all aspects of heritage through an annual heritage awareness programme (e.g. talks, walks, publications, exhibitions, seminars, training on best practice management and participation in national programmes and events such as Heritage Week, Biodiversity Day and Tree Week or other initiatives) aimed at key stakeholders and target groups including	None	None	None	

	community groups, schools and the public				
1.11	Establish the Boyne Valley Field Club and organise an annual programmes of activities (outings, field walks, tea talks etc.) in partnership with national and local stakeholders	None	None	None	Establishment of Boyne Valley Field Club will raise awareness of NATURA 2000 sites in the county
1.12	Publish an explanatory booklet or leaflet about the geology of county with particular reference to publically accessible sites	None	None	None	

Strategic Theme 2:

Disseminate existing heritage data and information to a wide audience and undertake surveys/projects where information gaps exist

No	Action	Potential likely significant direct Impact to Natura 2000 sites	Potential likely significant indirect Impact to Natura 2000 sites	Potential likely significant cumulative impacts to Natura 2000 sites	Comment
2.1	Establish and maintain an archive of all archaeological reports (including excavation, testing, monitoring, EIS, geophysical survey, other assessments) written in relation to planning applications or research work across the county	None	None	None	
2.2	Ensure that all sites newly found through archaeological investigations and verified by National Monuments Service on archaeology.ie or by other means are recorded on the Council GIS system and integrated into planning procedures, from the time of verification/recording by the relevant authorities	None	None	None	
2.3	Develop and maintain a comprehensive Meath Heritage Data GIS-based Web Portal by collating and digitizing available records, databases and reports on heritage assets in the county. This database will be compatible with existing national databases to avoid duplication with other existing databases or those in development	None	None	None	
2.4	Disseminate information on the heritage of the County through the use of digital	None	None	None	

	technologies including Smartphone apps, multi-media presentations (audio, video guides, etc.) and social media				
2.5	Seek to support research on and publication of unpublished manuscript legacy of Meath's poets, scribes and scholars	None	None	None	
2.6	Progress developmental work on photographic archive through acquisition, scanning, and cataloguing utilising newest best standard models	None	None	None	
2.7	Compile an inventory of flora and fauna in the county	None	None	None	This action will work on compiling existing datasets
2.8	Undertake surveys/projects to gather heritage data where information gaps exist	None	None	None	
2.9	Identify, map and assess the condition of existing milestones in the county	None	None	None	
2.10	Publish and disseminate Meath Graveyard Inventory and support local groups in documenting and recording graveyards	None	None	None	
2.11	Compile and inventory of navigable waterways to advance the conservation and management of navigable waterways in partnership with all relevant stakeholders	None	None	None	Desk based project
2.12	Compile a comprehensive inventory of scientific papers relating to Meath's geology and geomorphology	None	None	None	This action will work on compiling existing published data

Strategic Theme 3: Promote best practice in the conservation and management of Meath's heritage assets

No.	Action	Potential likely significant direct Impact to Natura 2000 sites	Potential likely significant indirect Impact to Natura 2000 sites	Potential likely significant cumulative	Comment
3.1	Establish in-house training programmes for Council staff involved in the management of heritage (archaeology/built and/or natural heritage) of the county with particular reference to up-to-date best practice. These training programmes should familiarise council staff involved in decisions which might affect heritage with existing national databases and resources to inform the decision-making process	None	None	None	Training will involve training on biodiversity and including care and conservation of NATURA 2000 sites – which should increase awareness of any likely threats to the integrity of sites
3.2	Implement the County Meath Biodiversity Action Plan 2015-2020 in partnership with all relevant stakeholders and the community	None	None	None	The individual actions of the Biodiversity Plan have been

					screened and are presented in a separate assessment. The AA Screening Report concluded that the Plan would not have significant adverse impacts on Natura 2000 sites.
3.3	Establish Boyne Valley Conservation Volunteers in the county in partnership with Louth County Council	None	None	None	Conservation volunteers aim s will be to improve habitat quality on sites
3.4	Establish a Historic Monuments Advisory Committee	None	None	None	
3.5	Establish an in-house historic buildings committee for the following purposes: to act as a means for information exchange; to organise seminars; to examine issues of	None	None	None	

	and to co-ordinate guidance and advice in relation to the care, maintenance, management, and financing of the Local Authority's historic building resource				
3.6	Create a panel of conservation architects available to provide Meath County Council, if required, with advice on conservation works to historic structures	None	None	None	

Strategic Theme 4: Work in partnership with local communities and other key stakeholders to actively engage with, enjoy and care for our heritage

No.	Action	Potential likely significant direct Impact to Natura 2000 sites	Potential likely significant indirect Impac	Potential likely significant cumulative impact	Comment
4.1	Establish a Meath County Council Community Heritage Grants Scheme to support local communities undertake heritage projects and an Annual Heritage Awards for projects / communities which have demonstrated best practice regarding heritage understanding, recording or conservation	None	None	None	No grants will be awarded to projects which may have a potential impact of NATURA 2000 without screening for appropriate for
4.2	Establish a network/forum for local heritage groups and run an annual event to advise on setting up, scoping projects, participating in county-wide projects (e.g. graveyards and oral histories), publications and grants	None	None	None	
4.3	Use the 'My Tara' project as a template for engaging	None	None	None	

	communities with their landscape				
4.4	Develop strategic linkages with third level institutes to encourage heritage research in Meath and seek sponsorship from private sector/interested parties to	None	None	None	
4.5	Support the ongoing work of the Meath Fieldnames Project by: <ul style="list-style-type: none"> a. Using the data already compiled in tourism & heritage initiatives b. Highlighting additional strands of the project as significant areas for academic research 	None	None	None	
4.6	Work in partnership with third-level institutes, the Discovery Programme, community groups and other stakeholders to develop and advance innovative research, education/outreach heritage projects and initiatives	None	None	None	Any project which have the potential to impact on NATURA 2000
4.7	Work in partnership with the relevant agencies/organisations and the public to promote an understanding of the heritage of waterways and associated	None	None	None	

4.8	Establish liaison and work in partnership with other local authorities on mutual heritage issues	None	None	None	
4.9	Engage with the community in a participatory process to prepare a Village Design Statement for Duleek including a Conservation and Management Plan for monuments	None	None	None	

Strategic Theme 5: Promote heritage as resource to contribute to quality of life, and cultural and economic development in Meath

No.	Action	Potential likely significant direct Impact to Natura 2000 sites	Potential likely significant indirect Impact to	Potential likely significant cumulative	Comment
5.1	Develop projects to revitalise and enhance historic town and village centres which will provide for the conservation, restoration, renewal and redevelopment of historic buildings and streetscapes, including upgrading of shop frontages and the public realm, and promote a high standard of civic design	None	None	None	It is possible that works in certain historic towns which are in close proximity to Natura 2000 sites (e.g. Navan, Slane and Trim) could result in indirect impacts to Natura 2000 sites. Any such proposals will be subject to further assessment as part of the AA Screening for public realm plans
5.2	Undertake a study on the economic, social, environmental/education impacts and opportunities of the UNESCO World Heritage Site at Brú Na Bóinne	None	None	None	
5.3	Meath County Heritage Forum/Meath County Council will actively explore EU funding opportunities; possibly in collaboration with other partners on a regional or trans-boundary basis	None	None	None	
5.4	Support and encourage the development of Knowth House as a centre for	None	None	None	

	Education				
5.5	Support the implementation of the <i>Brú na Bóinne World Heritage Site Research Framework</i> and <i>Brú na Bóinne World Heritage Site Management Plan</i>	None	None	None	
5.6	Work in partnership with key stakeholders to promote and develop County Meath as a centre for heritage education and a destination for cultural tourism	None	None	None	
5.7	Support a feasibility study on the provision of a county museum in consultation with national and local stakeholders and explore the development of a virtual (online) museum	None	None	None	
5.8	Establish links with the owners of historic houses to promote those open to the public as part of the Boyne Valley experience	None	None	None	
5.9	Support the development, in a sensitive manner, of greenways in the county and promote heritage along the routes	None	None	None	This action supports an objective of the Meath County Development Plan 2013-2019, A full appropriate assessment was carried out for the Meath CDP which incorporated mitigation measures to

					County. The development of such projects will be subject to obtaining necessary statutory consent, the carrying out of Appropriate
5.10	<p>Enhance biodiversity through the adoption of a Green Infrastructure based approach to planning to:</p> <ul style="list-style-type: none"> • Provide ongoing training for Planning Officers to integrate GI into mainstream planning functions • Prepare guidance on how biodiversity can be enhanced through the development management process i.e. preplanning, appropriate conditions, assessment of planning applications. • Introduction of Green Infrastructure based approach into the suite of corporate and statutory 				<p>A full appropriate assessment was carried out for the Meath Development 2013-2019. The Green Infrastructure approach is embedded within the County Development Plan</p>
5.11	Continue to work in partnership with the East Border Region Biodiversity Sub-Group as a follow on from EU INTERREG IVA Project				

	<i>Biodiversity</i> to further advance the implementation of the <i>East Border Region Biodiversity Framework</i> and <i>Why Biodiversity Matters Communications Strategy</i> and to seek EU funding for a further cross-border biodiversity partnership project				
5.12	Support the process of nomination to World Heritage status for sites in Meath on the Ireland's UNESCO World Heritage Tentative List: <ul style="list-style-type: none"> • Tara Complex as part of the <i>Royal Sites of Ireland</i> • Kells as part of the <i>Early Medieval Monastic Sites</i> 		None	None	This action supports an objective of the Meath County Development Plan 2013-2019.

Strategic Theme 6: To mainstream heritage within the Local Authority and seek the appointment of heritage professionals to support the delivery of an integrated heritage service

No.	Action	Potential likely significant direct Impact to Natura 2000 sites	Potential likely significant indirect Impact	Potential likely significant cumulative impacts	Comment
6.1	Establish a Meath Heritage Fund to support the implementation of the County Meath Heritage Plan	None	None	None	
6.2	<p>Seek the appointment of full time heritage professionals within Meath County Council required to implement key legislation and policy (Subject to (a) DoECLG sanction for the filling of staffing positions, and (b) the availability of sufficient budgetary resources to meet the salaries of any approved staffing positions):</p> <p>(i) Archivist, combining this role with that of <u>Records Manager</u> with particular responsibility for:</p> <ul style="list-style-type: none"> ○ Appraising records ○ Creating comprehensive finding aids ○ Implementing record management systems, and ○ Drawing up retention schedules to protect records and to enable access, while at the same time paying special heed to FOI and Data Protection legislation <p>(ii) <u>Project Archaeologist</u> with particular responsibility for:</p> <ul style="list-style-type: none"> ○ Advising on potential archaeological issues in the development and delivery of Meath County Council projects to include archaeological input into project design, fieldworks, mitigation, reporting, publication and dissemination ○ Managing archaeological budgets, contracts, performance and programmed delivery for archaeological sub-contractors employed by Meath County Council or their agents ○ Managing and developing an Archaeological Heritage Geographic Information System for County Meath 	None	None	None	<p>A Biodiversity will raise awareness and understanding of biodiversity by promoting, managing and co-ordinating biodiversity and biodiversity related activities in the county. Including NATURA 2000 sites</p>

	<p>(iii) Re-establish the post of <u>Meath Field Monuments Advisor</u> to:</p> <ul style="list-style-type: none"> ○ Monitor and report on the condition of ancient monuments within the geographical area of responsibility. ○ Liaise with monument owners and occupiers, local authorities, and other agencies on the condition of ancient monuments, advising them on appropriate management measures, including general advice on the relevant agri-environment schemes. ○ Devise awareness and educational initiatives ○ Monitor and report on the progress of any works or management action affecting ancient monuments <p>(iv) <u>Meath County Council Architect</u> to:</p> <ul style="list-style-type: none"> ○ Promote and encourage awareness of the importance of quality in design in architecture and the built environment. ○ Encourage improved practice in both public and private sectors, and the concept of sustainability in design, construction and maintenance of buildings. ○ Provide architectural services and advice to the County Council, Chief Executive, and Directors of Services in the following areas: <ul style="list-style-type: none"> • Planning, Urban Design and Public Realm • Housing and Regeneration • Libraries and other Civic Buildings • Conservation and Restoration • Consultation/Brief Preparation • Procurement of Works and Services • Project and Contract Management <p>(v) <u>Biodiversity Officer</u> to:</p> <ul style="list-style-type: none"> ○ Promote, manage and co-ordinate biodiversity and biodiversity related activities in the county ○ Facilitate and manage the preparation and implementation of the County Biodiversity Plan 				
--	--	--	--	--	--

	<ul style="list-style-type: none">○ Advise council departments with integrating biodiversity considerations into plans and projects○ Provide advice on biodiversity matters to community groups and the public				
--	---	--	--	--	--

2.7 Screening Conclusion

The County Meath Heritage Plan 2015-2020 is not directly connected with or necessary to the nature conservation management any NATURA 2000 site.

Screening has established that there is no potential for significant effects by the implementation of the County Meath Heritage Plan 2015-2020, either alone or in combination with other plans or projects, on any Natura 2000 site.

Therefore in accordance with *Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (2010)*; as significant impacts can be ruled out no further assessment is required.

APPENDIX A

Table A1 Qualifying Interests and Threats to Key Conditions for Natura 2000 sites

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
CANDIDATE SPECIAL AREAS OF CONSERVATION				
Boyne Coast and Estuary	IE0001957	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion & Accretion
		Embryonic shifting dunes	Dune-building grasses <i>Elytrigia juncea</i> and <i>Leymus arenarius</i> . Supply of windblown sand	Erosion, Walking horse riding and non-motorised vehicles, Trampling overuse, Sea defence or coastal protection works
		Estuaries	Supply of riverine freshwater. Unimpeded tidal flow. Shelter from open coasts. Diverse invertebrate communities.	Aquaculture, Recreational fishing, Housing development, Sewage outflow, Industrialisation, Autoroutes, Port/Marina, Water pollution, Reclamation of land, Drainage, Dredging, Invasion of Species
		Fixed coastal dunes with herbaceous vegetation (grey dunes)	Low wind, weakly saline conditions In shelter of <i>Ammophila arenaria</i> dunes. Grazing.	Erosion, Walking horse riding and non-motorised vehicles, Grazing, Undergrazing, Invasion by a species, Trampling, Overuse, Camping/Caravans, Agricultural Improvement/Restructuring agricultural land holdings, Stock Feeding, Motorised Vehicles, Paths Tracks & Cycling Routes, Golf Courses, Fertilisation, Sea defences

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
				or coastal protection works,
		Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion
		Mudflats and sandflats not covered by seawater at low tide	Silt deposits in sheltered estuaries.	Aquaculture, Professional fishing, Bait Digging, Removal of Fauna, Reclamation of Land, Coastal protection works, Invasion by a species
		Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence	Invasive Species, Erosion & Accretion, Grazing
		Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Supply of wind-blown sand.	Erosion, Walking/ Horse riding and non-motorised vehicles, Trampling - overuse, Motorised Vehicles
River Boyne and Blackwater	IE0002299	Alkaline fens	High water table. Ground -surface water supply. Calcium-rich conditions.	Agriculture & Land Reclamation, abstraction, Drainage, Turf Cutting, Afforestation
		Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)	Riparian/lacustrine habitat prone to flooding	Grazing, Invasive Species, Drainage, Planting of non-native conifers, felling of native tree species
		Atlantic Salmon <i>Salmo salar</i>	Riverine habitat. Water quality (Q4-5). Riverbed breeding	Cultivation (Pesticides, Fertilisation, Grazing), Pollution (Water Pollution), Grazing, Trampling/Overuse, Erosion, Afforestation,

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			gravels. Quality riparian vegetation. Unhindered migratory routes.	Aquaculture, Fishing, Sand & Gravel Abstraction, Quarries, Peat Extraction, Mining, Urbanisation, canalisation, barriers, invasive species, introduction of diseases
		River Lamprey <i>Lampetra fluviatilis</i>	Riverine habitat. Water quality. Riverbed breeding gravels and silt nursery substrate. Unhindered migratory channels.	River Channel Maintenance.
		Otter <i>Lutra lutra</i>	Prey availability. Water Quality. Riparian vegetation for breeding sites. Unhindered passage along waterways.	Water Pollution, Mortalities/Illegal Killings, Recreation/Disturbances, Hydroelectric Schemes, Aquaculture/fisheries, chemical spillages, American Mink
Rye Water Valley / Carton	IE0001398	Petrifying springs with tufa formation (Cratoneurion)	Calcium-rich, nutrient poor groundwater/surface water supply.	Agriculture & Land Reclamation, Drainage, Afforestation
		<i>Vertigo angustior</i>	Stable wetland water table. Emergent vegetation. Groundwater supply. Lime-rich conditions.	Agriculture & Land Reclamation. Habitat loss due to roads, motorways and urbanisation. Raising of water through reopening of disused feeder canal.
		<i>Vertigo moulinsiana</i>	Stable wetland water table. Emergent vegetation. Groundwater supply. Lime-rich	Climate Change, Flooding, Urbanisation (Habitat Encroachment, Pesticides, Fertilised, Grazing, Undergrazing, Afforestation, Stock Feeding, Burning, Peat Extraction, Communications

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			conditions.	Networks, Paths & Tracks, Walking/horse riding & non-motorised vehicles, Water Pollution, Landfill, Drainage, Modifying structures of inland watercourses.
Mount Hevey Bog	IE0002342	Active raised bogs	Surface water supply. Low nutrient, acidic conditions. <i>Sphagnum</i> spp.	Peat Cutting, Drainage Burning, Afforestation, Invasive Species
		Degraded raised bogs still capable of natural regeneration	Dessication from drainage.	Restructuring agricultural land holding, General Forestry Management, Burning, Mechanical Removal of Peat, Drainage, Invasion by Species
		Depressions on peat substrates of the Rhynchosporion	Peat cutting, Surface water supply	Drainage, Burning, Mechanical removal of peat, Overgrazing by sheep, Forestry Planting, Landfill land reclamation and drying out, climate change (Via habitat desiccation), Erosion, Invasion by species
White Lough, Ben Loughs and Lough Doo	IE0001810	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	Calcium rich, shallow, low nutrient waters.	Eutrophication, Overgrazing, Fertilisation, Afforestation, Invasive Alien Species, Sport & Leisure Activities, Housing Developments
		White clawed Crayfish <i>Austropotamobius pallipes</i>	Well oxygenated lakes/rivers with high pH. Riparian/ lacustrine substrate of cobbles/submerged vegetation.	Loss of Water Quality, Discharges: sewage effluent, Industrial discharges, organic compounds in water), Loss of Habitat Quality (cattle watering, trampling, infrastructural development, alteration of stream morphology by canalisation and dredging, eutrophication of rivers), Angling Leisure and introduction of species.

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
Lough Bane and Lough Glass	IE0002120	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	Calcium rich, shallow, low nutrient waters.	Eutrophication, Overgrazing, Fertilisation, Afforestation, Invasive Alien Species, Sport & Leisure Activities, Housing Developments, Abstraction.
Killyconny Bog (Cloughbally)	IE0000006	Active raised bog	Surfacewater supply. Low nutrient acidic conditions. <i>Sphagnum</i> spp.	Peat Cutting, Drainage Burning, Afforestation, Invasive Species
		Degraded raised bogs still capable of natural regeneration	Dessication from drainage. Low moss cover.	Restructuring agricultural land holding, General Forestry Management, Burning, Mechanical Removal of Peat, Drainage, Invasion by Species
Monybeg and Clareisland Bogs	IE0002340	Active raised bogs	Surface water supply. Low nutrient, acidic conditions. <i>Sphagnum</i> spp.	Peat Cutting, Drainage Burning, Afforestation, Invasive Species
		Degraded raised bogs still capable of natural regeneration	Dessication from drainage.	Restructuring agricultural land holding, General Forestry Management, Burning, Mechanical Removal of Peat, Drainage, Invasion by Species
		Depressions on peat substrates of the Rhynchosporion	Peat cutting, Surface water supply	Drainage, Burning, Mechanical removal of peat, Overgrazing by sheep, Forestry Planting, Landfill land reclamation and drying out, climate change (Via habitat desiccation), Erosion, Invasion by species
Ardagullion Bog	IE0002341	Active raised bogs	Surface water supply. Low nutrient, acidic conditions. <i>Sphagnum</i>	Peat Cutting, Drainage Burning, Afforestation, Invasive Species

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			spp.	
		Degraded raised bogs still capable of natural regeneration	Dessication from drainage.	Restructuring agricultural land holding, General Forestry Management, Burning, Mechanical Removal of Peat, Drainage, Invasion by Species
		Depressions on peat substrates of the Rhynchosporion	Peat cutting, Surface water supply	Drainage, Burning, Mechanical removal of peat, Overgrazing by sheep, Forestry Planting, Landfill land reclamation and drying out, climate change (Via habitat desiccation), Erosion, Invasion by species
Garriskil Bog	IE0000679	Active raised bogs	Surface water supply. Low nutrient, acidic conditions. <i>Sphagnum</i> spp.	Peat Cutting, Drainage Burning, Afforestation, Invasive Species
		Degraded raised bogs still capable of natural regeneration	Dessication from drainage.	Restructuring agricultural land holding, General Forestry Management, Burning, Mechanical Removal of Peat, Drainage, Invasion by Species
		Depressions on peat substrates of the Rhynchosporion	Peat cutting, Surface water supply	Drainage, Burning, Mechanical removal of peat, Overgrazing by sheep, Forestry Planting, Landfill land reclamation and drying out, climate change (Via habitat desiccation), Erosion, Invasion by species
Lough Lene	IE0002121	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	Calcium rich, shallow, low nutrient waters.	Eutrophication, Overgrazing, Fertilisation, Afforestation, Invasive Alien Species, Sport & Leisure Activities, Housing Developments
		White clawed	Well oxygenated	Loss of Water Quality, Discharges: sewage

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Crayfish <i>Austropotamobius pallipes</i>	lakes/rivers with high pH. Riparian/ lacustrine substrate of cobbles/submerged vegetation.	effluent, Industrial discharges, organic compounds in water), Loss of Habitat Quality (cattle watering, trampling, infrastructural development, alteration of stream morphology by canalisation and dredging, eutrophication of rivers), Angling Leisure and introduction of species.
Lough Ennell	IE0000685	Alkaline fens	High water table. Ground/surface water supply. Calcium-rich, nutrient-rich conditions.	Agriculture & Land Reclamation, Drainage, Turf Cutting, Afforestation
Raheenmore Bog	IE0000582	Active raised bogs	Surface water supply. Low nutrient, acidic conditions. <i>Sphagnum</i> spp.	Peat Cutting, Drainage Burning, Afforestation, Invasive Species
		Degraded raised bogs still capable of natural regeneration	Dessication from drainage.	Restructuring agricultural land holding, General Forestry Management, Burning, Mechanical Removal of Peat, Drainage, Invasion by Species
		Depressions on peat substrates of the Rhynchosporion	Peat cutting, Surface water supply	Drainage, Burning, Mechanical removal of peat, Overgrazing by sheep, Forestry Planting, Landfill land reclamation and drying out, climate change (Via habitat desiccation), Erosion, Invasion by species
The Long Derries, Edenderry	IE0000925	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)(*importa	Dry, shallow, calcium rich nutrient poor soils. Light grazing.	Encroachment by Pteridium aquilinum and woody shrub species, undergrazing, Fertiliser, Agricultural Improvement - cultivation, Abandonment of pastoral systems, sand and gravel extraction

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		nt orchid sites)		
Ballynafagh Bog	IE0000391	Active raised bogs	Surface water supply. Low nutrient, acidic conditions. <i>Sphagnum</i> spp.	Peat Cutting, Drainage Burning, Afforestation, Invasive Species
		Degraded raised bogs still capable of natural regeneration	Dessication from drainage.	Restructuring agricultural land holding, General Forestry Management, Burning, Mechanical Removal of Peat, Drainage, Invasion by Species
		Depressions on peat substrates of the Rhynchosporion	Peat cutting, Surface water supply	Drainage, Burning, Mechanical removal of peat, Overgrazing by sheep, Forestry Planting, Landfill land reclamation and drying out, climate change (Via habitat desiccation), Erosion, Invasion by species
Ballynafagh Lake	IE0001387	Alkaline fens	High water table. Ground/surface water supply. Calcium-rich, nutrient-rich conditions.	Agriculture & Land Reclamation, Drainage, Turf Cutting, Afforestation
		Marsh Fritillary <i>Euphydryas aurinia</i>	Larval foodplant <i>Succisia pratensis</i> . Grassland sward structure. Water supply for damp conditions.	Changes in agricultural regimes, habitat loss roads, motorways Urbanised areas
		Whorl Snail <i>Vertigo moulinsiana</i>	Stable wetland water table. Emergent vegetation. Groundwater supply. Lime-rich conditions.	Climate Change, Flooding, Urbanisation (Habitat Encroachment, Pesticides, Fertilised, Undergrazing, Afforestation, Stock Feeding, Burning, Peat Extraction, Communications Networks, Paths & Tracks, Walking/horse riding

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
				& non-motorised vehicles, Water Pollution, Landfill, Drainage, Modifying structures of inland watercourse. Raising water levels through reopening of disused feeder canal.
North Dublin Bay	IE0000206	Annual vegetation of drift lines	Sandy substrate. Physical impact and nutrient supply from tidal flow.	Grazing, Sand & Gravel extraction - Removal of Beach materials, Walking horse riding - non motorised vehicles, outdoor sports & motorised vehicles, other leisure & tourism impacts, Trampling overuse, sea defences & coastal protection works
		Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion & Accretion
		Embryonic shifting dunes	Dune-building grasses <i>Elytrigia juncea</i> and <i>Leymus arenarius</i> . Supply of windblown sand	Erosion, Walking horse riding and non-motorised vehicles, Trampling overuse, Sea defence or coastal protection works
		Fixed coastal dunes with herbaceous vegetation (grey dunes)	Low wind, weakly saline conditions In shelter of <i>Ammophila arenaria</i> dunes. Grazing.	Erosion, Walking horse riding and non-motorised vehicles, Grazing, Undergrazing, Invasion by a species, Trampling, Overuse, Camping/Caravans, Agricultural Improvement/Restructuring agricultural land holdings, Stock Feeding, Motorised Vehicles, Paths Tracks & Cycling Routes, Golf Courses, Fertilisation, Sea defences

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
				or coastal protection works,
		Humid dune slacks	High water maintained by groundwater and impermeable soils. Grazing. Salinity.	Agricultural Improvement, Fertilisation, Grazing, Restructuring agricultural land holding, Forestry, Stock Feeding, Golf Course, Walking, horse riding and non-motorised vehicles, motorised vehicles, trampling/overuse, drainage, other human changes in hydraulic conditions, drying out, invasion by a species
		Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion
		Mudflats and sandflats not covered by seawater at low tide	Silt deposits in sheltered estuaries.	Aquaculture, Professional fishing, Bait Digging, Removal of Fauna, Reclamation of Land, Coastal protection works, Invasion by a species
		Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence	Invasive Species, Erosion & Accretion, Grazing
		Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Supply of wind-blown sand.	Erosion, Walking/ Horse riding and non-motorised vehicles, Trampling - overuse, Motorised Vehicles
		Petalwort <i>Petalophyllum ralfsii</i>	Lime-rich sandy habitat. Overgrazing. Water supply for damp conditions.	Grazing Imbalance, Physical Disturbance, Pollution, Desiccation, trampling from stock and recreation, changes in land use.
Baldoyle Bay	IE0000199	Atlantic salt meadows	Frequency of tidal	Grazing, Infilling & Reclamation, Invasive

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		(Glauco-Puccinellietalia maritimae)	submergence	Species, Erosion
		Mediterranean salt meadows (Juncetalia maritimi)	Frequency of tidal submergence	Aquaculture, Professional fishing, Bait Digging, Removal of Fauna, Reclamation of Land, Coastal protection works, Invasion by a species
		Mudflats and sandflats not covered by seawater at low tide	Diverse invertebrate communities. Silt deposits in sheltered estuaries.	Invasive Species, Erosion & Accretion, Grazing
		Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion
Malahide Estuary	IE0000205	Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion & Accretion
		Fixed coastal dunes with herbaceous vegetation (grey dunes)	Low wind, weakly saline conditions In shelter of <i>Ammophila arenaria</i> dunes. Grazing.	Erosion, Walking horse riding and non-motorised vehicles, Grazing, Undergrazing, Invasion by a species, Trampling, Overuse, Camping/Caravans, Agricultural Improvement/Restructuring agricultural land holdings, Stock Feeding, Motorised Vehicles, Paths Tracks & Cycling Routes, Golf Courses, Fertilisation, Sea defences or coastal protection works,
		Mediterranean salt meadows (Juncetalia	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		maritimi)		
		Mudflats and sandflats not covered by seawater at low tide	Silt deposits in sheltered estuaries.	Aquaculture, Professional fishing, Bait Digging, Removal of Fauna, Reclamation of Land, Coastal protection works, Invasion by a species
		Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence	Invasive Species, Erosion & Accretion, Grazing
		Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Supply of wind-blown sand.	Erosion, Walking/ Horse riding and non-motorised vehicles, Trampling - overuse, Motorised Vehicles
		<i>Spartina</i> swards (<i>Spartinion maritimae</i>)	Frequency of tidal submergence. Supply of mud sediment on seaward edge of saltmarsh.	Erosion (Non-Native Habitat)
Rogerstown Estuary	IE0000208	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion & Accretion
		Estuaries	Supply of riverine freshwater. Unimpeded tidal flow. Shelter from open coasts. Diverse invertebrate communities.	Aquaculture, Recreational fishing, Housing development, Sewage outflow, Industrialisation, Autoroutes, Port/Marina, Water pollution, Reclamation of land, Drainage, Dredging, Invasion of Species
		Fixed coastal dunes	Low wind, weakly saline	Erosion, Walking horse riding and non-motorised

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		with herbaceous vegetation (grey dunes)	conditions in shelter of <i>Ammophila arenaria</i> dunes. Grazing.	vehicles, Grazing, Undergrazing, Invasion by a species, Trampling, Overuse, Camping/Caravans, Agricultural Improvement/Restructuring agricultural land holdings, Stock Feeding, Motorised Vehicles, Paths Tracks & Cycling Routes, Golf Courses, Fertilisation, Sea defences or coastal protection works,
		Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion
		Mudflats and sandflats not covered by seawater at low tide	Silt deposits in sheltered estuaries.	Aquaculture, Professional fishing, Bait Digging, Removal of Fauna, Reclamation of Land, Coastal protection works, Invasion by a species
		Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence	Invasive Species, Erosion & Accretion, Grazing
		Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Supply of wind-blown sand.	Erosion, Walking/ Horse riding and non-motorised vehicles, Trampling - overuse, Motorised Vehicles
Clogher Head	IE0001459	European dry heaths	Free-draining nutrient poor acid soils. Grazing and burning.	Agricultural Improvements, Removal of Scrub, Cultivation, Fertilisation, Over Grazing by sheep, Burning, Invasion by Species, Vandalism,
		Vegetated sea cliffs of the Atlantic and Baltic coasts	Flat topography on coastal cliff bedrock. High pH influence of sands and seabird guano	Fertilisation, Grazing, Overgrazing, Restructuring agricultural land holding, Burning, Disposal of household waste, Golf Course, Trampling overuse, Sea defences/ coastal protection works,

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
				Erosion
Dundalk Bay	IE0000455	Atlantic salt meadows (Glauco-Puccinellietalia maritima)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion & Accretion
		Estuaries	Supply of riverine freshwater. Unimpeded tidal flow. Shelter from open coasts.	Aquaculture, Recreational fishing, Housing development, Sewage outflow, Industrialisation, Autoroutes, Port/Marina, Water pollution, Reclamation of land, Drainage, Dredging, Invasion of Species
		Mediterranean salt meadows (Juncetalia maritimi)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion
		Mudflats and sandflats not covered by seawater at low tide	Silt deposits in sheltered estuaries.	Aquaculture, Professional fishing, Bait Digging, Removal of Fauna, Reclamation of Land, Coastal protection works, Invasion by a species
		Perennial vegetation of stony banks	Cobble substrate. Tidal levels. Sediment supply from wind and waves.	Sand & Gravel extraction - Removal of Beech Materials, Infrastructure development
		Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence	Invasive Species, Erosion & Accretion, Grazing
Rockabill to Dalkey Island	Unknown	Reefs and Harbour Porpoise <i>Phocoena phocoena</i>	Marine currents, food supply for Porpoises.	Underwater noise and vibration, aquaculture, dredging and dumping at sea.
SPECIAL PROTECTION AREAS				

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
Boyne Estuary	[004080]	Shelduck (<i>Tadorna tadorna</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.	Infilling of Intertidal mudflats, Pollution from Drogheda town, hard coastal developments. Disturbance from recreational activities at coast and offshore.
		Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands.	
		Golden Plover (<i>Pluvialis apricaria</i>)	Undisturbed coastal roosting sites close to feeding areas.	
		Grey Plover (<i>Pluvialis squatarola</i>)		
		Lapwing (<i>Vanellus vanellus</i>)		
		Knot (<i>Calidris canutus</i>)		
		Sanderling (<i>Calidris alba</i>)		
		Black-tailed Godwit (<i>Limosa limosa</i>)		
		Redshank (<i>Tringa totanus</i>)		
		Turnstone (<i>Arenaria interpres</i>)		
Little Tern (<i>Sterna albifrons</i>)	Sea level. Natural/artificial nest site			

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation	
		Wetlands & Waterbirds	-	
River Nanny Estuary and Shore	[004158]	Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	Infilling of Intertidal mudflats, Pollution from upstream urbanisation, hard coastal developments. Disturbance from recreational activities at coast and offshore.
		Ringed Plover (<i>Charadrius hiaticula</i>)		
		Knot (<i>Calidris canutus</i>)		
		Sanderling (<i>Calidris alba</i>)		
		Wetlands & Waterbirds	-	
Lough Sheelin	[004065]	Great Crested Grebe (<i>Podiceps cristatus</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.	Eutrophic conditions, phosphorus inputs to the feeder streams entering the lake. Disturbance from recreational and wildfowling activities.
		Pochard (<i>Aythya ferina</i>)		
		Tufted Duck (<i>Aythya fuligula</i>)		
		Goldeneye (<i>Bucephala clangula</i>)		

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Wetlands & Waterbirds	-	
River Boyne and Blackwater	[004232]	Kingfisher (<i>Alcedo atthis</i>)	Marine/freshwater food availability. Undisturbed soft substrate riparian nest sites. Regularity of extreme weather. Water quality.	Disturbance from riverside recreation, loss of nest sites due to bankside interference. Loss of riparian scrub and woodland.
Stabannan Braganstown	[004091]	Greylag Goose (<i>Anser anser</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	Infilling of habitats, Pollution from upstream urbanisation, hard coastal developments. Disturbance from recreational activities.
North Bull Island	[004006]	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	Infilling of Intertidal mudflats, Pollution from upstream urbanisation, hard coastal developments. Disturbance from recreational activities at coast and offshore.
		Shelduck (<i>Tadorna tadorna</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.	

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Teal (<i>Anas crecca</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.	
		Pintail (<i>Anas acuta</i>) Shoveler (<i>Anas clypeata</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.	
		Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
		Grey Plover (<i>Pluvialis squatarola</i>)		
		Knot (<i>Calidris canutus</i>)		
		Sanderling (<i>Calidris alba</i>)		
		Black-tailed Godwit (<i>Limosa limosa</i>)		
		Bar-tailed Godwit (<i>Limosa lapponica</i>)		

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Curlew (<i>Numenius arquata</i>)		
		Redshank (<i>Tringa totanus</i>)		
		Turnstone (<i>Arenaria interpres</i>)		
		Golden Plover (<i>Pluvialis apricaria</i>)		
		Black-headed Gull (<i>Chroicocephalus ridibundus</i>)		
		Dunlin (<i>Calidris alpina</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
		Wetlands & Waterbirds	-	
(South Dublin Bay) Sandymount Strand / River Tolka Estuary	[004024]	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	Infilling of Intertidal mudflats, Pollution from upstream urbanisation, hard coastal developments. Disturbance from recreational activities at coast and offshore.

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
		Ringed Plover (<i>Charadrius hiaticula</i>)		
		Golden Plover (<i>Pluvialis apricaria</i>)		
		Knot (<i>Calidris canutus</i>)		
		Sanderling (<i>Calidris alba</i>)		
		Bar-tailed Godwit (<i>Limosa lapponica</i>)		
		Redshank (<i>Tringa totanus</i>)		
		Roseate Tern (<i>Sterna dougallii</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation	
		Common Tern (<i>Sterna hirundo</i>)		
		Arctic Tern (<i>Sterna paradisaea</i>)		
Baldoyle Bay	[004016]	Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed	Infilling of Intertidal mudflats, Pollution from upstream urbanisation, hard coastal developments. Disturbance from recreational activities at coast and offshore.

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			coastal roosting sites close to feeding sites. Grazing.	
		Shelduck (<i>Tadorna tadorna</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.	
		Ringed Plover (<i>Charadrius hiaticula</i>)	Food availability (intertidal fauna/pasture).	
		Grey Plover (<i>Pluvialis squatarola</i>)	Flooding regime of coastal grasslands.	
		Bar-tailed Godwit (<i>Limosa lapponica</i>)	Undisturbed coastal roosting sites close to feeding areas.	
		Golden Plover (<i>Pluvialis apricaria</i>)		
		Wetlands & Waterbirds	-	
Rogerstown Estuary	[004015]	Greylag Goose (<i>Anser anser</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	Infilling of Intertidal mudflats, Pollution from upstream urbanisation, hard coastal developments. Disturbance from recreational activities at coast and offshore.
		Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)		
		Shelduck (<i>Tadorna</i>)	Food availability	

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		<i>tadorna</i>	(intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.	
		Shoveler (<i>Anas clypeata</i>)		
		Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
		Ringed Plover (<i>Charadrius hiaticula</i>)		
		Grey Plover (<i>Pluvialis squatarola</i>)		
		Knot (<i>Calidris canutus</i>)		
		Black-tailed Godwit (<i>Limosa limosa</i>)		
		Redshank (<i>Tringa totanus</i>)		
Skerries Islands	[004122]	Shag (<i>Phalacrocorax aristotelis</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds and roosting sites.	Invasive predatory species (Rats, birds, foxes). Offshore pollution (chemical spillages).
		Light-bellied Brent	Food availability	

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Goose (<i>Branta bernicla hrota</i>)	(intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	
		Purple Sandpiper (<i>Calidris maritima</i>)	Food availability (intertidal fauna/pasture).	
		Turnstone (<i>Arenaria interpres</i>)	Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
(Malahide Estuary)Broadmeadow / Swords Estuary	[004025]	Great Crested Grebe (<i>Podiceps cristatus</i>)	Fish/crustacean prey availability in shallow inshore waters. Undisturbed, ice-free marine/freshwater feeding grounds.	Infilling of Intertidal mudflats, Pollution from upstream urbanisation (Broadmeadow River & Sewage Plants at Swords & Malahide), hard coastal developments. Disturbance from recreational activities at coast and offshore.
		Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	
		Shelduck (<i>Tadorna tadorna</i>)	Food availability (intertidal invertebrates)	

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			and vegetation). Undisturbed coastal roosting sites close to feeding sites.	
		Pintail (<i>Anas acuta</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.	
		Goldeneye (<i>Bucephala clangula</i>)		
		Red-breasted Merganser (<i>Mergus serrator</i>)	Fish/crustacean prey availability in shallow inshore waters. Undisturbed, ice-free marine/freshwater feeding grounds.	
		Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
		Golden Plover (<i>Pluvialis apricaria</i>)		
		Grey Plover (<i>Pluvialis squatarola</i>)		
		Knot (<i>Calidris canutus</i>)		
		Black-tailed Godwit (<i>Limosa limosa</i>)		

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Bar-tailed Godwit (<i>Limosa lapponica</i>)		
		Redshank (<i>Tringa totanus</i>)		
		Wetlands & Waterbirds	-	
Dundalk Bay	[004026]	Great Crested Grebe (<i>Podiceps cristatus</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.	Infilling of Intertidal mudflats, Pollution (point-source and diffuse -agricultural and domestic), hard coastal developments. Disturbance from recreational activities at coast and offshore.
		Greylag Goose (<i>Anser anser</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	
		Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)		
		Shelduck (<i>Tadorna tadorna</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.	
		Teal (<i>Anas crecca</i>)		
		Mallard (<i>Anas platyrhynchos</i>)	Food availability (intertidal flora and	

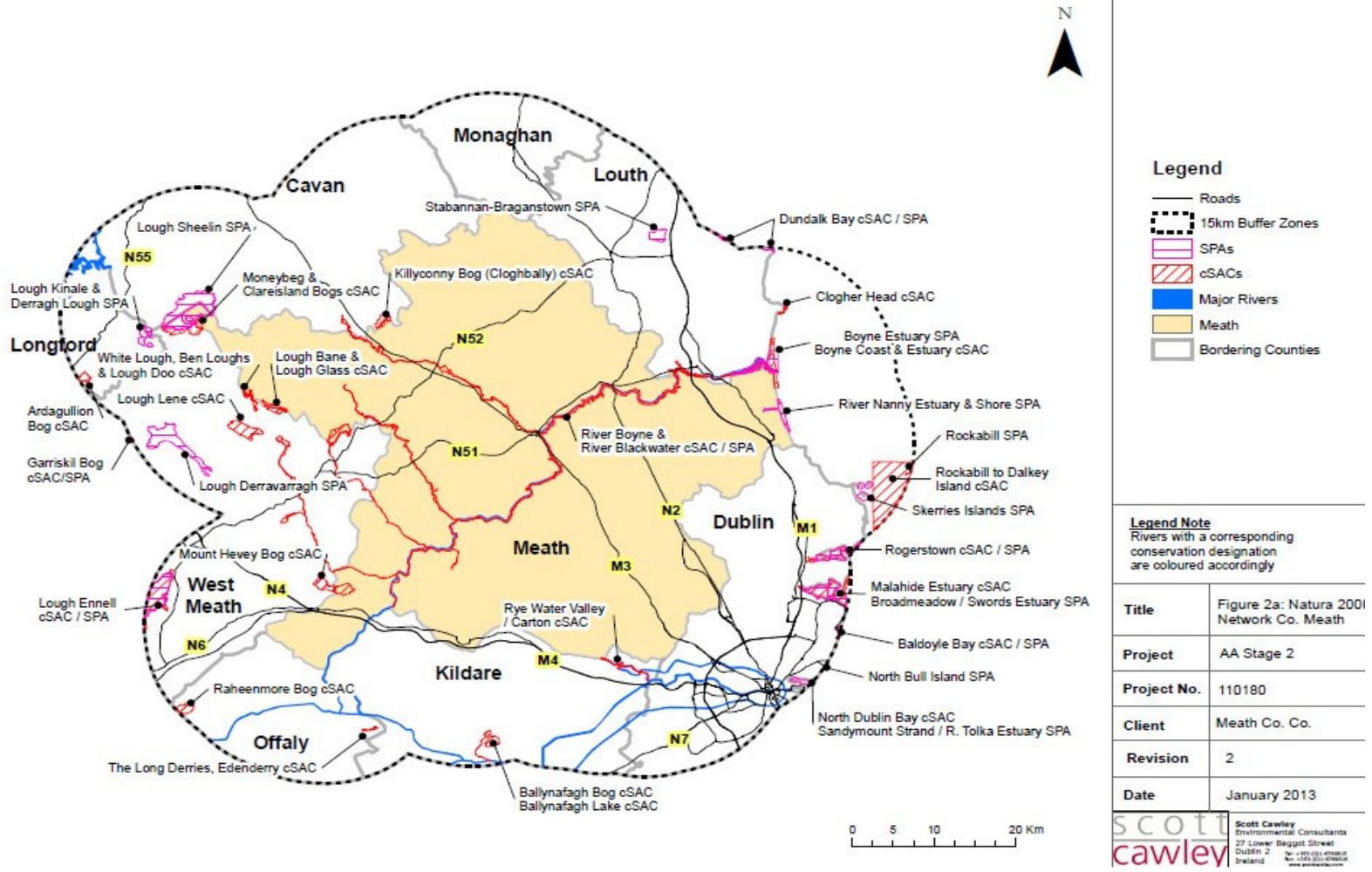
Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			fauna/pasture/cereal). Undisturbed roosting sites close to feeding sites.	
		Pintail (<i>Anas acuta</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.	
		Common Scoter (<i>Melanitta nigra</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.	
		Red-breasted Merganser (<i>Mergus serrator</i>)		
		Oystercatcher (<i>Haematopus ostralegus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
		Ringed Plover (<i>Charadrius hiaticula</i>)		
		Golden Plover (<i>Pluvialis apricaria</i>)		
		Grey Plover (<i>Pluvialis squatarola</i>)		
		Lapwing (<i>Vanellus vanellus</i>)		

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		Knot (<i>Calidris canutus</i>)		
		Dunlin (<i>Calidris alpina</i>)		
		Black-tailed Godwit (<i>Limosa limosa</i>)		
		Bar-tailed Godwit (<i>Limosa lapponica</i>)		
		Curlew (<i>Numenius arquata</i>)		
		Redshank (<i>Tringa totanus</i>)		
		Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	Food availability (intertidal fauna/pasture/sewage). Coastal water quality.	
		Common Gull (<i>Larus canus</i>)	Marine prey availability. Wetland foraging area. Undisturbed roost site availability.	
		Herring Gull (<i>Larus argentatus</i>)	Coastal water quality.	
		Wetlands & Waterbirds	-	
Lough Kinale and Derragh Lough	[004061]	Pochard (<i>Aythya ferina</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters.	Eutrophication. Siltation of shallow waters. Pollution (point-source and diffuse -agricultural and domestic), hard coastal developments.
		Tufted Duck (<i>Aythya</i>)		

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
		<i>fuligula</i>)	Undisturbed, ice-free marine/freshwater feeding grounds.	Disturbance from recreational activities at coast and offshore.
Garriskill Bog	[004102]	Merlin (<i>Falco columbarius</i>)	Moorland Prey availability. Undisturbed forested/moorland nest sites. Regularity of extreme weather. Water quality.	Drainage, modification of inland rivers, afforestation/deforestation, Restructuring agricultural land holding. Burning.
		Snipe (<i>Gallinago gallinago</i>)	Food availability (interidal fauna/pasture).	
		Curlew (<i>Numenius arquata</i>)	Flooding regime of coastal grasslands.	
		Redshank (<i>Tringa totanus</i>)	Undisturbed coastal roosting sites close to feeding areas.	
Lough Derraghvarragh	[004043]	Whooper Swan (<i>Cygnus cygnus</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.	Infilling of Intertidal mudflats, Pollution (point-source and diffuse -agricultural and domestic), Disturbance from recreational and wildfowling activities.
		Pochard (<i>Aythya ferina</i>)	Fish/crustacean prey availability in shallow inshore waters.	
		Tufted Duck (<i>Aythya fuligula</i>)	Undisturbed, ice-free marine/freshwater	

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Threats to Key Conditions
			feeding grounds.	
		Coot (<i>Fulica atra</i>)	Food availability (aquatic flora and fauna). Undisturbed freshwater roosting sites close to feeding sites.	
Lough Ennell	[004044]	Pochard (<i>Aythya ferina</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.	Pollution (point-source and diffuse -agricultural and domestic), Increases in recreational activity.
		Tufted Duck (<i>Aythya fuligula</i>)		
		Coot (<i>Fulica atra</i>)		
Rockabill	[004014]	Roseate Tern (<i>Sterna dougallii</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation	Invasive predatory species (Rats, birds, foxes). Offshore pollution (chemical spillages).
		Common Tern (<i>Sterna hirundo</i>)		
		Arctic Tern (<i>Sterna paradisaea</i>)		

APPENDIX I



Source: Volume IV – County Meath Development Plan 2013-2019 - Natura Impact Report

