



comhairle chontae na mí
meath county council

East Meath Local Area Plan 2014-2020

**Bettystown / Laytown / Mornington East / Donacarney /
Mornington**



Appropriate Assessment: Natura Impact Report



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Appendix A

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

Appendix B

Policy Guidance Note

1. INTRODUCTION

1.1. Legal Requirement for Appropriate Assessment

This Natura Impact Report (NIR) was prepared by Scott Cawley Ltd. on behalf of Meath County Council. It provides information on and assesses the potential for the Local Area Plan for Bettystown-Laytown-Mornington East and Donacarney-Mornington to impact on sites of European-scale ecological importance. This is the final version of the NIR and is published alongside the adopted Local Area Plan and serves as a documented record of the process of the Appropriate Assessment of the Plan throughout its preparation.

The preparation of the 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 Part XAB of the Planning and Development (Amendment) Act 2010 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 sites within the Natura 2000 network (hereafter referred to as "European sites". (Annex 1.1).

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 Natura Impact Report is a documentary record of the Appropriate Assessment process for the Local Area Plan.

1.2. Appropriate Assessment: Purpose and Process

Meath County Council has prepared the Local Area Plan. This Plan sets out objectives and policies which will be used to guide the development of this area within County Meath.

All land use plans, such as the Local Area Plan 2014-2019, must be prepared and examined to ensure that there will not be any significant adverse effects 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 Plan was a structured exercise with a series of steps. The overall purpose of the process was to ensure that the Plan, when implemented, does not result in adverse effects on the "integrity" of these European sites. The overall process is termed "Appropriate Assessment", using the terms set out in the EC Habitats Directive Article 6(3).

The first step was to look at the overall Plan in principle and to answer the questions: is it likely that the implementation of this Plan could result in likely significant effects on European sites? It does not matter where these sites may be – impacts can occur across administrative boundaries. This step is known as Screening for Appropriate Assessment. The Screening Stage is described in more detail in Section 2.

If the screening stage results in a judgement that likely significant effects may occur or cannot be ruled out, then a more detailed 'Appropriate Assessment' (AA) is required. Whilst the structure of this assessment process is not specified in the legislation, there are guidance documents that are used to provide an indication of how this assessment may be carried out.

In order to ensure that the Plan complied fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation, Scott Cawley Ltd on behalf of Meath County Council carried out the screening of the Draft Plan to see if it required an AA. Section 2 records the output of the Screening Stage.

The outcome of this Screening Stage was that it was determined that due to the types of development that could arise as a result of implementing the Plan and due to the proximity of the lands to European sites, that significant effects were likely and that the Draft Plan would need further assessment. The Appropriate Assessment process then moved to Stage 2- (also confusingly referred to as Appropriate Assessment).

To inform the preparation of the Draft Plan, a Policy Guidance Note (included in Appendix B) was prepared by the Appropriate Assessment Team. This Note highlighted the ways in which the Plan may result in impacts on the individual cSACs and SPAs and provided recommended Policies and Objectives to be included in the Draft Plan.

Stage 2 involved analysing the relationship between the proposed policies and objectives in the Draft Plan and the sensitivities of the European sites. Where there was the potential for an impact to occur, then the assessment team recommended changes to elements of the Draft Plan to avoid or mitigate the potential impact. These recommendations were integrated into the Draft Plan so that the implementation of the Final Plan will not result in any significant effects on Natura 2000 sites. In accordance with best practice a hierarchy of mitigation was followed *i.e.* avoidance of impacts by removing policies/objectives, followed by caveats/changes to policies/objectives to mitigate any likely significant impacts.

Meath County Council provided the Appropriate Assessment team with draft Chapters during their process of preparing the Draft Plan. These Chapters were reviewed and revised by the Council in an iterative process of reviewing. A summary of the results of this iterative review of the Draft Plan are provided in Section 3.4.

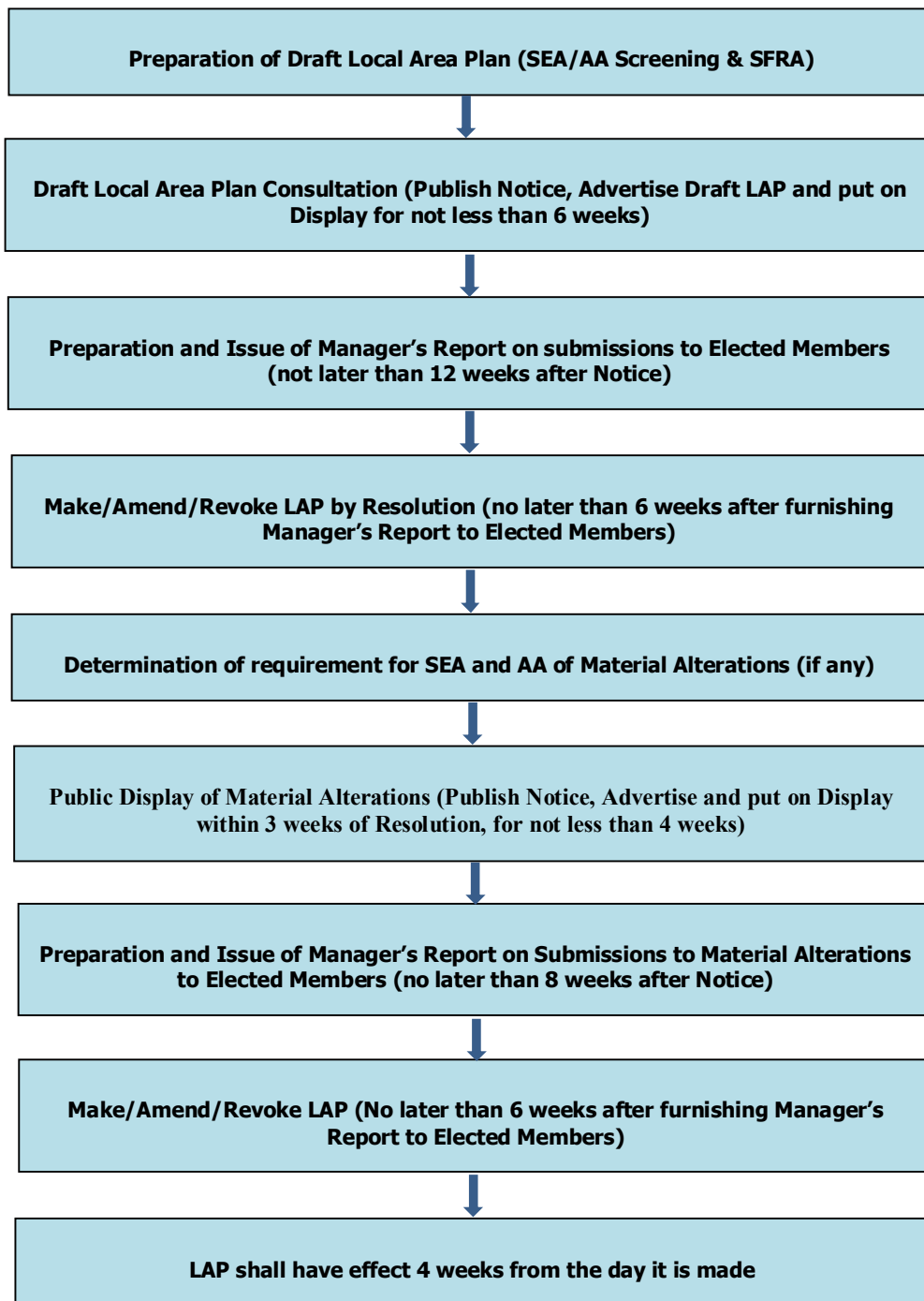
The Proposed Draft Plan went on public display from 13th December 2013 to 3rd February 2014 inclusive. A total of 105 submissions were received during the draft consultation phase. A Manager's Report was prepared following the end of the public display period. This Report summarised the issues raised in the submission, detailed the Manager's response to the issues and recommendations from the Manager to make alterations, where deemed necessary, to the Proposed Draft Plan. The submissions and the proposed recommendations to make alterations were "screened" for any likelihood of significant effects on European sites. The results of this screening are included in this NIR.

The Members of Meath County Council, having considered the Manager's recommendations resolved that the Draft Plan be altered. The proposed alterations constituted a material alteration of the Draft Plan and as a result, it was placed on public display from Tuesday, 13th May 2014 to Tuesday 10th June 2014 inclusive.

Thirty-six submissions were received during the public display period of the Material Alterations to the Proposed Draft Plan. A report summarising the issues raised and the Chief Executive's recommendations (formerly referred to as 'manager's recommendations') was presented to the Elected Members and agreed by resolution at the council meeting on 7th July 2014. The Local Area Plan came into effect four weeks from that date.

Figure 1 overleaf shows the process of the Appropriate Assessment, in relation to the preparation of the Local Area Plan.

A Strategic Environmental Assessment (SEA) Environmental Report and Flood Risk Assessment accompanied the Draft LAP and amendments to the Draft LAP during the public display periods. A SEA Environmental Report and Statement also accompanies the final adopted Local Area Plan.



(NB: This statutory timeframe may be amended in accordance with the Planning and Development Act 2000 as amended, depending on the determination of the requirement for AA and/or SEA Assessments)

Figure 1: Statutory Local Area Plan Process

1.3. Overlap with the Strategic Environmental Assessment of the Local Area Plan.

The Strategic Environmental Assessment of the Local Area Plan was carried out concurrently with the Appropriate Assessment. There were several areas of overlap and in accordance with good practice in terms of data gathering and sharing, data on European sites and potential sensitivities and threats was provided to the SEA team. Iterative reviews of the Chapters of the Draft Local Area Plan were sent to the SEA Team for their integration into their assessment.

1.4 Formal Guidance

The AA 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)

1.5 Data Sources

Sources of information that were used to collect data on the European 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 April 2013 to June 2014).
- 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
- Biodiversity Data for County Meath including that collated through the implementation of the Meath County Heritage Plan
- 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 Service¹
- *The Status of Birds in Ireland: An Analysis of Conservation Concern 2008-2013*²
- Relevant Development Plans and Local Area Plans in neighbouring areas
- Meath County Development Plan 2013-2019 Natura Impact Report
- Submissions made during Public Display period
- 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

1.6 Consultation and Public Participation

An informal consultation meeting was held with regional staff of the National Parks and Wildlife Service and consultants from Scott Cawley Ltd- Appropriate Assessment Consultants, on 6th and 27th November 2013. The purpose of this meeting was to discuss the status of the Natura 2000 network of European sites in the area around the Draft Plan, their sensitivities and threats and how the Draft Plan can be prepared to avoid impacts on these sites. The comments made at this meeting were integrated into the AA process as far as possible.

In September 2013, Meath County Council published a Strategic Issues Paper (Non-Statutory) in order to stimulate debate and encourage participation. Submissions were received from interested parties and were disseminated to the AA team in mid-October 2013.

The Draft Natura Impact Report was published alongside the Draft Local Area Plan during the period of public consultation.

The results of the screening of the proposed amendments to the Draft Plan were included in the Manager's Report.

¹ NPWS (2013a). *The Status of EU Protected Habitats and Species in Ireland*. Species Assessments Volume 2, Version 1.0. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

NPWS (2013b). *The Status of EU Protected Habitats and Species in Ireland*. Species Assessments Volume 3, Version 1.0. Unpublished Report, National Parks & Wildlife Services. Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.

² Colhoun K. & Cummins S. (2014). *Birds of Conservation Concern in Ireland 2014-2019*. BirdWatch Ireland.

2. STAGE 1 – SCREENING FOR APPROPRIATE ASSESSMENT

2.1. Overview of Bettystown-Laytown-Mornington East Donacarney-Mornington Local Area Plan 2014-2020.

This Natura Impact Report is within Volume 4 of the Local Area Plan for Bettystown-Laytown-Mornington East Donacarney-Mornington 2014-2020.

This Local Area Plan (LAP) has been prepared to provide a statutory framework for the future growth and development of Bettystown-Laytown-Mornington East-Donacarney-Mornington. The purpose of the LAP is to guide future development within these towns and villages in a sustainable and equitable manner and to inform members of the public, the local community, stakeholders and developers of the policies and objectives that will shape development within the plan area. This LAP is consistent with the policies and objectives contained in the Meath County Development Plan 2013-2019, including the Core Strategy.

Volume 1 of the Local Area Plan is divided into four Sections.

- Section 1: Introduction
- Section 2: Strategic Vision, Core Strategy & Themes
- Section 3: Development Management
- Section 4: Development Policies & Objectives

Volume 2 consists of Appendices A: Zoning and Objective Maps, and B: Residential Evaluation Maps which should be viewed in conjunction with the Written Statement. Volume 3 Appendix C includes the Flood Risk Assessment.

Policies and Objectives within Volumes 1 and 2 have formed the focus of the Appropriate Assessment process.

2.2. Timing of Screening in the Development Plan process

Section 177U (2a) of the Planning and Development Act as amended by Section 57 of the Planning and Development (Amendment) Act 2010 (30/2010) clearly states that the screening of any plan for likely significant effects should take place before the plan is made. Good practice agreed amongst AA professionals is that it should be a relatively brief stage at the beginning of the Draft Plan preparation process. Its aim is to decide if the Draft Plan needs to be taken forward to a more detailed level of assessment (Stage 2: Appropriate Assessment or AA) and which European 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.

The Screening stage was undertaken at the stage prior to the preparation of detailed policies in the Draft Local Area Plan. This was an ideal stage to start as the Screening process was able to highlight particular sensitivities of Natura 2000 sites and hence help to avoid drafting policies that would have a direct conflict with these sensitivities.

AA Screening also took place when amendments to the Draft Plan were proposed prior to being put to the Elected Members and being put on public display.

2.3. Screening Steps

Best practice in AA Screening promotes a site-led approach to the process. The site-led approach puts the environmental conditions that maintain site integrity- first. So the first steps in the screening stage are identifying the European sites within the "zone of influence" of the Plan area and then collecting as much information as possible on the "Qualifying Interests" and how site integrity may be defined for each Natura 2000 site. The site-led approach focuses on how the site integrity can be maintained by avoiding impacts on key environmental conditions. This approach allows issues such as cumulative impacts to be identified.

The site-led approach is summarised as follows:

1. Which Natura 2000 sites lie within or adjacent to the area of the Local Area Plan and within its zone of influence?³
2. What are the Qualifying Interests for each Natura site?
3. What are the underpinning ecological and environmental conditions to maintain these Qualifying Interests at Favourable Conservation Status?
4. What are the threats – actual or potential- that could affect the underpinning factors?
5. Are there aspects of the Local Area Plan that could give rise to these threats?

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

2.4. Pre-Screening Of Sites

In accordance with the Department of Environment, Heritage and Local Government guidance (DoEHLG, 2010), an initial distance of 15km from the Draft Plan boundary was selected for consideration of European sites. This distance was deemed to be sufficient to cover all likely significant effects which may arise from the implementation of the Plan on European sites although it was acknowledged that in theory the Plan Area is linked to the Boyne and Nanny Catchments, so these areas were also considered. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website on 13th November 2013.

In addition to examining Natura 2000 sites, Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHA) which fall within 15km of the County boundary have also been examined. Although NHAs and pNHAs do not form part of the Natura 2000 Network, they often provide an important supporting role to the network, particularly when it comes to fauna species which often do not obey site boundaries. For example, a pNHA/NHA that provides regular feeding grounds for a population of Golden Plover for which a separate site is designated as an SPA plays a role in the maintenance of the species at favourable conservation status for that SPA. In other words, in that example, in order to protect the Natura 2000 network it may also be important to protect the pNHA /NHA which provides a supporting role to it. There are however, NHAs and pNHAs that are designated for features that are not important at an international level and may not interact with the Natura 2000 network.

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

³ Departmental guidelines recommend looking at sites within 15km. However this arbitrary distance is currently being reviewed and is generally being replaced with an informed judgement as to the extent of the influence of the proposed Plan. However in order to avoid any confusion prior to the revision of any formal guidance, the 15km buffer zone has been applied in this case.

Table 1: European Sites found in County Meath and within 15km buffer zone.

Candidate Special Areas of Conservation (cSAC)	Special Protection Areas (SPA)
Boyne Coast and Estuary	Boyne Estuary
River Boyne and Blackwater	River Nanny Estuary and Shore
Clogher Head	River Boyne and Blackwater
Dundalk Bay	Skerries Islands
Rockabill to Dalkey Island	Dundalk Bay
	Rockabill

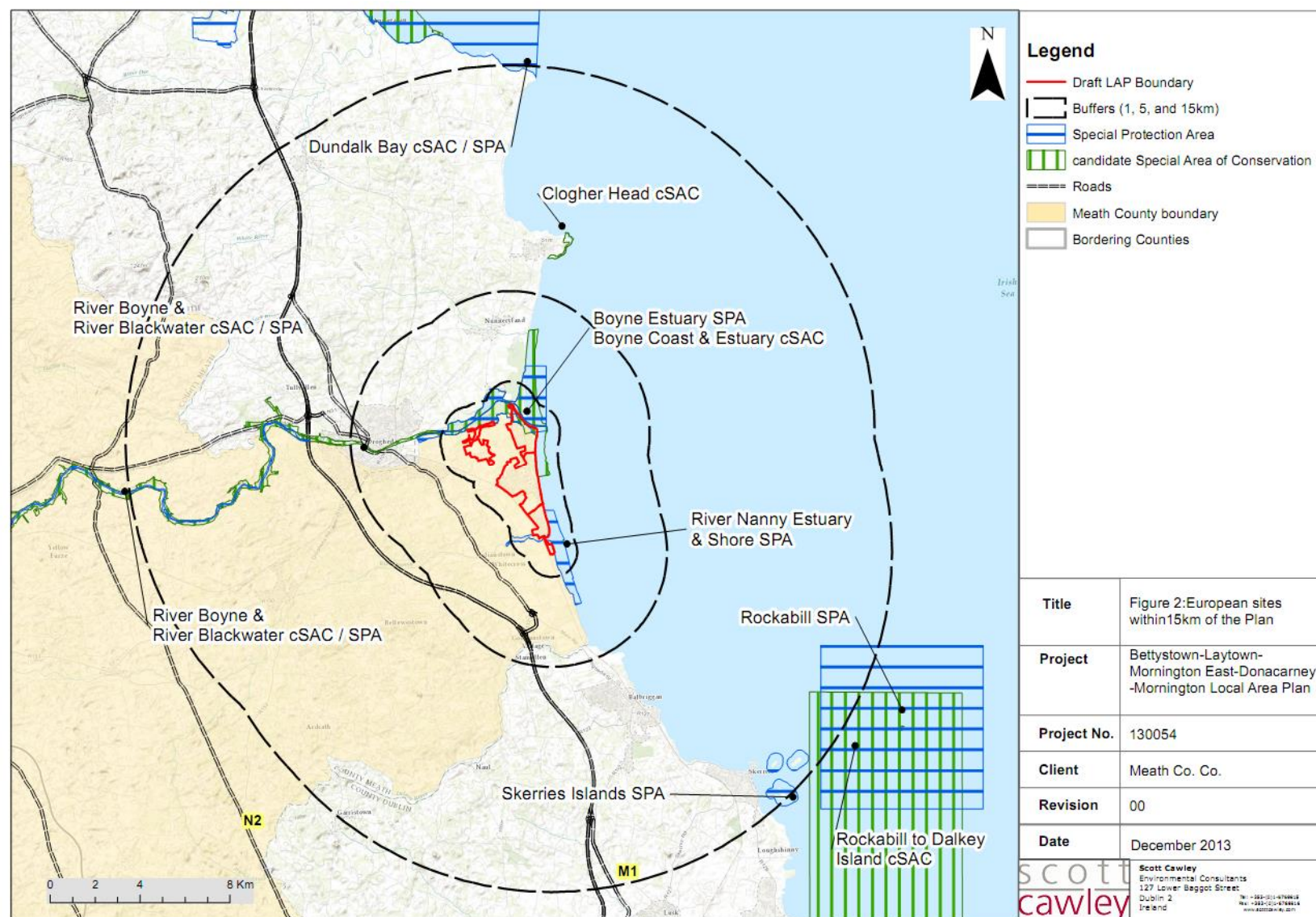
All of these sites are presented on Figure 2.

Table 2: Natural Heritage Areas and Proposed Natural Heritage Areas found in County Meath and within 15km buffer zone.

Sites within 15km Buffer Zone	
Proposed Natural Heritage Areas (pNHA)	Natural Heritage Areas (NHA)
Boyne Coast and Estuary	Skerries Islands
Boyne River Islands	
Crewbane Marsh	
Cromwells Bush Fen	
Dowth Wetland	
Laytown Dunes / Nanny Estuary	
Rossnaree Riverbank	
Barmeath Woods	
Blackhall Woods	
Bog of the Ring	
Castlecoo Hill	
Clogher Head	
Dunany Point	
King William's Glen	
Knock Lake	
Mellifont Abbey Woods	

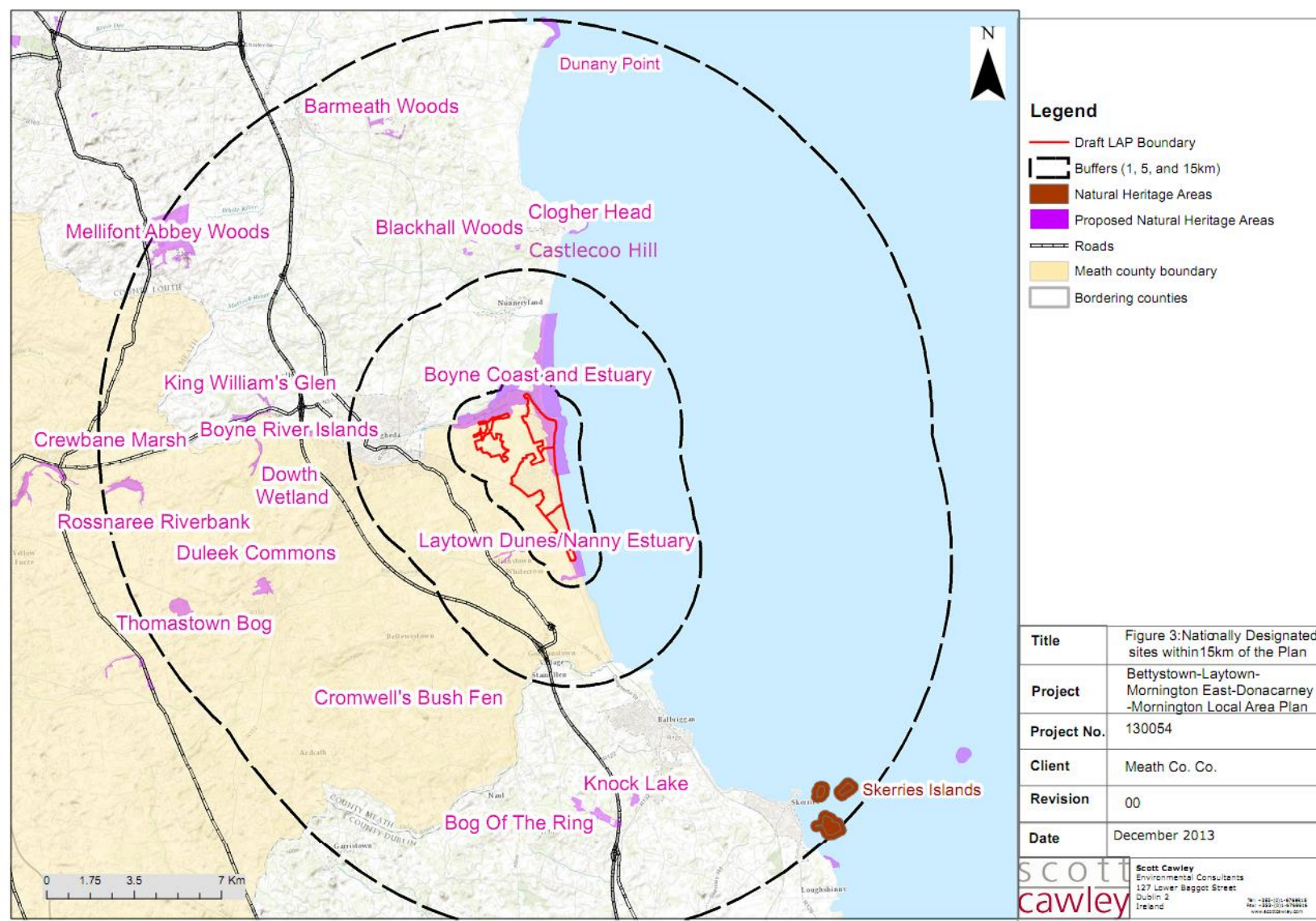
All of these sites are presented on Figure 3.

Appropriate Assessment of Local Area Plan Bettystown-Laytown-Mornington East Donacorney-Mornington 2014-2020



Natura Impact Report for Bettystown-Laytown-Mornington East-Donacorney-Mornington Local Area Plan 2014-2020

Appropriate Assessment of Local Area Plan Bettystown-Laytown-Mornington East Donacorney-Mornington 2014-2020



Natura Impact Report for Bettystown-Laytown-Mornington East-Donacorney-Mornington Local Area Plan 2014-2020

2.5. Reasons For Designation, Site Sensitivities And Threats

In order to identify those sites that could be potentially affected, it was necessary to describe each European 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). Threats to sites were also scoped during informal consultation with regional NPWS staff in January 2012 as part of the County Development Plan preparation process and again in November 2013.

The results of this desktop exercise are presented in Appendix A and summarised below in Table 3. This presents the list of qualifying interests that are contained within the European sites listed above in Table 1. The underpinning conditions that are required to maintain the 'health' of these features are listed in this table.

Table 3: Qualifying Interests in European sites and the underpinning environmental conditions.

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, Alnion incanae, Salicion albae)	Riparian/lacustrine habitat prone to flooding
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>Glaucopuccinellietalia 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).
Curlew (<i>Numenius arquata</i>)	Food availability (interidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Dunlin (<i>Calidris alpina</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
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	Low wind, weakly saline conditions in shelter of <i>Ammophila arenaria</i>

Appropriate Assessment of Local Area Plan
Bettystown-Laytown-Mornington East Donacarney-Mornington 2014-2020

Qualifying Interests	Key environmental conditions supporting site integrity
herbaceous vegetation (grey dunes)	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.
Herring Gull (<i>Larus argentatus</i>)	Coastal water quality.
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.
Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Frequency of tidal submergence.
Mudflats and sandflats not covered by seawater at low tide	Silt deposits in sheltered estuaries.
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.
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.

Qualifying Interests	Key environmental conditions supporting site integrity
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.
Shag (<i>Phalacrocorax aristotelis</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds and roosting sites.
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.
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.

The key output of this stage was the identification of the types of threats to the integrity of the European sites. These can then be related to the consequences of implementing the Draft Local Area Plan to see if there is any risk of likely significant effects.

Generic potential threats to the site integrity were identified and are listed below. These were generic threats and did not take account of specific sensitivities at each European site. There are also aspects of the implementation of the LAP that are not likely to give rise to such threats, such as many of the rural/agricultural activities but they are listed below to provide a complete account of threats to the sites.

Consultation of the NPWS Natura 2000 data forms, the Article 17 Reports (NPWS 2013a, 2013b) and liaison with regional staff allowed site-specific sensitivities to be identified. These site-specific sensitivities are presented in Section 2.6 onwards.

Rural/Agricultural activities

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

2.6. Identification of Potential Likely Significant Effects

This section documents the final stage of the screening process. It used the information collected on the sensitivity of each European site and describes any likely significant effects of implementation of the Plan (as far as it could be predicted at the Draft Plan stage). This assumes the absence of any controls, conditions or assumptions regarding mitigation measures.

In Table 4, likely significant effects of the Draft Plan were presented both in isolation and potentially in combination with other plans. These impacts were described in more detail and addressed in Stage 2: Appropriate Assessment.

**Appropriate Assessment of Local Area Plan
Bettystown-Laytown-Mornington East Donacarney-Mornington 2014-2020**

Table 4: Likely Significant Effects of implementing the Draft Local Area Plan (in absence of mitigation).

Site	Potential Impacts arising from the Draft Plan	Is there a likely risk of a Significant Effect?	Other plans to be considered in Combination? ⁴	Is there a risk of Significant Impact in combination?
CANDIDATE SPECIAL AREAS OF CONSERVATION				
Boyne Coast and Estuary	Construction works in proximity to the coastline can threaten local water quality. Coastal works can affect embryonic dunes which are sensitive to changes in coastal geomorphology. Cumulative impacts on water quality in the wider Boyne catchment could lead to greater level of significance in terms of water quality lower in the catchment and consequent effects on habitats and species.	YES	Louth County Development Plan, River Basin Management Plan. FEMFRAMS.	YES
River Boyne and Blackwater	Cumulative effects of water abstraction for potable water supply within catchment of alkaline fens and river levels. Indirect impacts on alluvial forests, disturbance of otter holts from riverside development including active and passive recreation. Due to lack of direct interface between cSAC and Draft LAP lands, the risk of interaction is deemed to be relatively low.	YES	Westmeath, Cavan, Louth, County Development Plans and Local Area Plans, River Basin Management Plan, FEMFRAMS.	YES
Clogher Head cSAC	Considered too distant for any impacts to be likely as a result of the Plan.	No	-	No
Dundalk Bay cSAC	Considered too distant for any impacts to be likely as a result of the Plan.	No	-	No
Rockabill to Dalkey Island cSAC	Considered too distant for any impacts to be likely as a result of the Plan.	No	-	No
SPECIAL PROTECTION AREA				
Boyne Estuary	Potential impacts due to increased levels of recreational activities from nearby growth in local residential population. Developments in Boyne catchment leading to cumulative changes in water quality.	YES	Louth County Development Plan, Drogheda & Environs Town Plan, River Basin Management Plan. FEMFRAMS.	YES
River Nanny Estuary and Shore	Impacts due to increased levels of recreational activities from nearby growth in local residential population. Developments in River Nanny catchment leading to cumulative changes in water quality.	YES	Fingal County Development Plan, River Basin Management Plan.	YES

⁴This list is not considered to be exhaustive.

**Appropriate Assessment of Local Area Plan
Bettystown-Laytown-Mornington East Donacarney-Mornington 2014-2020**

Site	Potential Impacts arising from the Draft Plan	Is there a likely risk of a Significant Effect?	Other plans to be considered in Combination?⁴	Is there a risk of Significant Impact in combination?
River Boyne and Blackwater	Kingfisher nesting sites may be affected by increased levels of active and passive recreation at coastal sites, especially in winter as this species often overwinters at the coast.	YES	Westmeath, Cavan, Louth, County Development Plans and Local Area Plans, River Basin Management Plan, FEMFRAMS.	YES
Skerries Islands	Birds that form conservation interests at this site are not a conservation interest of any site within or close to the Local Area Plan that might be affected so no impacts likely on this population as a result of the Draft Plan.	No	-	No
Dundalk Bay SPA	Population dynamics of some birds may be affected indirectly by direct impacts on other sites within European sites close to the Local Plan area that also support these species (Great Crested Grebe, Shelduck, Golden Plover, Black-tailed Godwit) and others. No direct impacts likely.	YES	Louth County Development Plan. River Basin Management Plans.	YES
Rockabill SPA	Birds that form conservation interests at this site are not a conservation interest of any site within the Local Area Plan that might be affected so no impacts likely on this population as a result of the Draft Plan.	No	-	No

2.7. Ecological Network Supporting Natura 2000 Site Integrity

An analysis of the proposed Natural Heritage Areas and designated Natural Heritage Areas in terms of their role in supporting the species using Natura 2000 sites was undertaken. It was assumed that these supporting roles mainly related to mobile fauna such as mammals and birds which may use pNHAs and NHAs as "stepping stones" between European sites.

Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account during the rest of the AA process.

Therefore it was deemed to be important to identify those national-level designated sites that were within, adjacent or close to the Local Area Plan area and to determine if they were part of this network of ecological sites.

Their locations are shown in Figure 3.

Table 5. Other Ecological designations that may support the European sites.

Name of Proposed Natural Heritage Area/Natural Heritage Area.	Feature and Habitat Used by Feature	European Site potentially linked to the pNHA/NHA Supported
Knock Lake (001203)	Lapwing (70), Curlew (67), Whooper Swan (4), Black-tailed Godwit (9), Black-headed Gull (111), Coot (54), Tufted Duck (58)	Numerous coastal SPAs and Lough Derravaragh SPA (004043) & Lough Ennel SPA & Lough Sheelin SPA (004065) & Lough Kinale & Deggagh Lough SPA (004061)
Bog of the Ring (001204)	Whooper Swan and lake/bog	Lough Derravaragh SPA (004043)
	Golden Plover and bog	South Dublin Bay and River Tolka Estuary SPA (004024) & Broadmeadow/Swords Estuary SPA (004025) & Baldoyle SPA (004016)
	Lapwing (141) and grassland	River Boyne & River Blackwater cSAC (004232)

2.8. Screening Conclusions

The Screening process identified six European sites that had the potential to be adversely affected by the implementation of the Draft Local Area Plan.

- Boyne Coast and Estuary cSAC;
- Boyne Estuary SPA;
- River Boyne and Blackwater cSAC;
- River Boyne and Blackwater SPA;
- River Nanny Estuary and Shore SPA; and
- Dundalk Bay SPA.

Sites that were “screened out” were not deemed to be subject to further consideration in the assessment.

The Screening process identified that there were several non-European sites in the LAP area (NHAs, pNHAs) that overlapped with the European sites. For example, the Boyne Coast and Estuary cSAC covers the pNHA area of the same name. However the pNHA extends beyond the boundary of the Boyne Coast and Estuary cSAC and SPA covering the golf course lands. Similarly the Laytown Dunes/Nanny Estuary pNHA extends further upstream than the River Nanny Estuary and Shore SPA.

3. STAGE 2 - APPROPRIATE ASSESSMENT

3.1 Assessment Methodology

The assessment of impacts on the European sites was undertaken by the following tasks:

1. Establishing site-specific issues so that the impact evaluation is correctly informed.

- This was primarily achieved through research of desktop information, site familiarisation visits undertaken in November 2013 and consultation with regional staff of the NPWS.

2. Issuing a Policy Guidance Note for Meath County Council to pro-actively inform the preparation of Policies and Objectives.

- This Note contained a summary of the Screening Exercise and recommendations of policies to promote and avoid during the preparation of the Draft Local Area Plan (included in Appendix B).

3. Iterative Review of draft Chapters of the Draft Local Area Plan to allow the amendment of Policies and Objectives. By doing so, potential impacts were avoided or mitigated through the addition of additional Policies and Objectives.

3.2 European Sites relevant to the Assessment

After examination of the “long list” of European sites and examining any linkages between the underlying purpose of the Draft Local Area Plan and the sensitivities of these sites, it was determined that only six European sites were at risk of any likely significant effects caused by the consequences of development in the Plan area.

These sites comprised:

- Boyne Coast and Estuary cSAC;
- Boyne Estuary SPA;
- River Boyne and Blackwater cSAC;
- River Boyne and Blackwater SPA;
- River Nanny Estuary and Shore SPA; and
- Dundalk Bay SPA.

3.3 Overview of the European Sites.

3.3.1 Boyne Estuary SPA

Whilst there are areas of this European site within the LAP boundary (at the Beacon and at Lady's finger), the Plan area includes does not include any intertidal areas and encompasses only terrestrial (supratidal) lands above the high water mark. As shown in Appendix A1, the 11 Special Conservation Interest (SCI) species for the Boyne Estuary SPA are wetland birds that predominantly feed and roost in intertidal areas below the high water mark.

This is illustrated by the Conservation Objectives Supporting Document⁵ for the SPA (NPWS, 2012). In this document, all habitats within the SPA have been mapped as either intertidal habitats (divided into supratidal, intertidal, subtidal), or terrestrial habitats. The distribution of each Special Conservation Interest species at both high and low tidal phases has been mapped over these habitat types using dots (1 or 2 dots per bird). An example is provided in Figure 3 below.

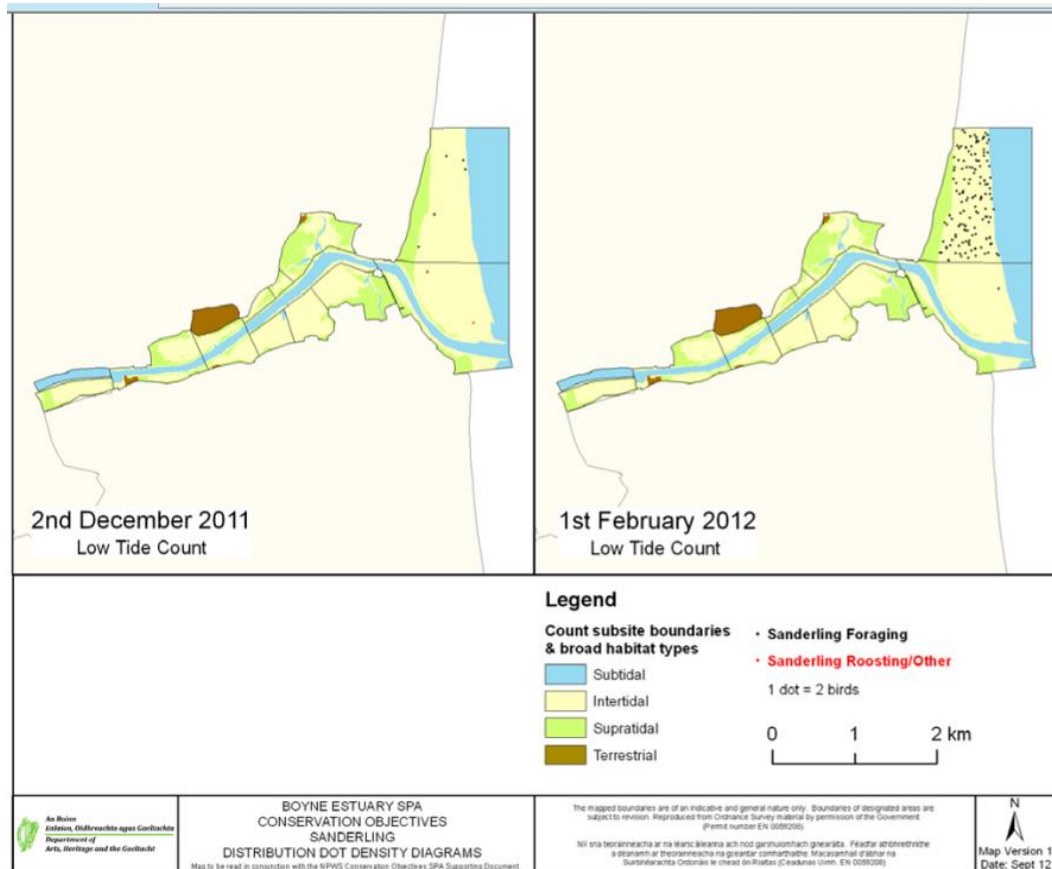


Figure 4 Sample "Dot-density diagram" from Boyne Estuary SPA Conservation Objective Supporting Document (NPWS, 2012) showing habitat mapping overlain by bird distribution.

⁵ Boyne Estuary SPA Conservation Objectives Supporting Document Version 1 (NPWS, 2012).

Available online at

<http://www.npws.ie/protectedsites/specialprotectionareasspa/boyneestuaryspa/>

Analysis of the high and low tide mapping for all Special Conservation Interests found no usage of terrestrial habitats by any birds for which the SPA is designated. There is therefore no physical overlap between the Draft Plan and habitats used by birds within the SPA.

Nevertheless, the birds may be subject to disturbance from land and water based activities that could be related to policies and objectives proposed in the Draft Plan so this impact type was focussed upon. Evidence for disturbance was taken from the Conservation Objectives Supporting Document. Types of disturbing activities along the shoreline in the Boyne Estuary included flight path (aircraft flying over), walking (incl. dogs), powered watercraft, non-powered watercraft, shooting and horse-riding. The most common activity was people walking along the shoreline with/without dogs. Shooting (as opposed to wildfowling) was recorded adjacent to specific areas but was observed to have little determinable effects on waterbirds. The document states

"Any activity that causes disturbance can lead to the displacement of waterbirds. The significance of the impact that results from even a short-term displacement should not be underestimated. In terms of foraging habitat, displacement from feeding opportunities not only reduces a bird's energy intake but also leads to an increase in energy expenditure as a result of the energetic costs of flying to an alternative foraging area. Displacement also has knock-on ecological effects such as increased competition within and/or between different species for a common food source. In areas subject to heavy or on-going disturbance, waterbirds may be disturbed so frequently that their displacement is equivalent to habitat loss. When disturbance effects reduce species fitness (reduced survival or reproductive success) consequences at population level may result." 5.4.4 p43.

Surveys in 2011/12 recorded the highest levels of disturbance at Lady's Finger (north of the Draft LAP lands) by people walking with/without dogs and also at Baltray (north of the river mouth) where there is an important Little tern colony. However the response of waterbirds to disturbance is complex and the significance of disturbance both acute and chronic, depends upon many other interacting factors including timing, weather, age and condition of birds, frequency, intensity and availability of alternative sites. A precautionary approach is generally adopted as a result of the unpredictability of this impact-response relationship.

The SPA SCI species are all "wetland" birds, meaning they depend on wetland habitats for their survival. However, some wetland birds also use inland pasture land near coastal areas for feeding or roosting during high tide, due to extreme weather, or if human disturbance reduces favourability of wetland sites. Eight of the SCI species are "wader" species known to use grassland pastures to a significant degree, and any of these could potentially occur in inland farmland fields within the Draft LAP area⁶. The remaining two SCI species do not use these habitats, in part due to their preference for either fish (Little Tern), or aquatic vegetation and invertebrates (Shelduck).

There is often very limited data on bird usage of such undesignated terrestrial sites, because their usage by wetland birds is complex and linked to localised weather and tidal

⁶ Wader species include a range of shallow water feeding birds in several taxonomic groupings. The Boyne Estuary SPA SCIs likely to feed in grasslands are all waders, namely Oystercatcher, Golden Plover, Grey Plover, Lapwing, Knot, Black-tailed Godwit, Redshank, Turnstone.

patterns, and disturbance levels. Usage of grassland fields by wetland birds is therefore often sporadic and difficult to predict.

In order to determine the level of use of inland fields by these bird species to inform the AA, a consultation exercise was undertaken in November 2013 with the local NPWS Conservation Ranger and local birdwatchers including several members of the Meath Branch of Birdwatch Ireland. There were no known records of grassland feeding by any Boyne Estuary SPA Special Conservation Interest Species within or adjacent to the LAP area. Wetland bird use of any farmland area may change during the year, and between years, due to crop rotation, land-management, and weather-related factors as described above. As such sites are not designated, there is often no management agreement in place with landowners to actively manage features such as crop type, sward height, or field size to favour birds.

There are large swathes of farmland in the hinterland of the plan area. Therefore even if fields within the plan area currently used by wetland birds are lost to development, it is unlikely that alternative fields would not be used by these populations. It is also possible that in the absence of the draft Plan, wetland bird feeding fields could become unsuitable for other reasons. Potential factors could include a change from grass to cereal, or an increase in stocking leading to intolerable levels of disturbance by cattle).

In conclusion, whilst it is likely that there will be no significant effects to SPA populations resulting from changes to farmlands within the Draft Plan area, this is based upon absence of any evidence and therefore the use of the inland fields cannot be ruled out. It is unlikely that significant flocks of birds use these fields on regular occasions as more records would be likely to exist.

3.3.2 River Boyne and Blackwater SPA

The Plan area is located adjacent to the Boyne Estuary, but is several kilometres downstream of the freshwater limits of the River Boyne and Blackwater SPA (4232) where the sole SCI, Kingfisher *Alcedo atthis*, breeds.

Kingfisher spend the spring and summer in sluggish, freshwater reaches of river systems where they nest in riverbank habitats. Female and young birds may move to coastal areas in wintertime where they feed in brackish water, while male birds may remain to defend the freshwater breeding territory throughout wintertime.

There are records of Kingfisher in the vicinity of the LAP area at the lower reaches of the Boyne Estuary from the British Trust for Ornithology and Birdwatch Ireland Bird Atlas 2007-2011 dataset⁷. The River Boyne records are likely to relate only to the "non-breeding season" (*i.e.* late summer to spring), which could include non-breeding birds from the River Boyne and Blackwater SPA population dispersing to coastal areas outside the nesting season. Wintering birds feed and roost in close proximity to intertidal areas.

There are also regular records for the River Nanny in the online Irish Birding sightings database⁸. These include Kingfisher records within the draft plan area at Laytown (non-

⁷ Irish National Grid 10km grid square IO17 includes the draft plan area. Data available online at <http://blx1.bto.org/atlas/square-access/num-square-summ.jsp> Accessed 27th November 2013.

⁸ Available online at <http://www.irishbirding.com/birds/web/Display/article/1/>

breeding only, most recently August 2013), and several kilometres upstream of the plan area at Julianstown (breeding and non-breeding, most recently June 2013).

The adoption of the Plan is unlikely to result in significant increases disturbance of non-breeding Kingfisher from recreational activities along the Boyne estuary relative to that on existing roads and paths. However, birds that are part of the SPA breeding population are likely to use other watercourses such as the Mornington Stream that flows through the northern part of the LAP lands. Impacts of development, deterioration of surface water quality and disturbance of feeding areas in this location could potentially have adverse effects on these populations in the SPA. This was taken into account during the assessment of the Draft Plan.

3.3.3 River Nanny Estuary and Shore SPA (4158)

As described for the Boyne Estuary SPA, the draft Plan area along the River Nanny Estuary and Shore SPA (hereafter the 'River Nanny SPA') includes only terrestrial habitats, and there is no physical overlap with designated wetland habitats mapped in the Conservation Objectives Supporting Document⁹ for the River Nanny SPA (NPWS, 2012). Five of the six SCI bird species for the River Nanny Estuary and Shore SPA are wetland birds. The Herring Gull is a notable exception, having colonized urban areas in recent decades, where it is commonly found in parks, ponds and other amenity areas, and is entirely tolerant of human disturbance due to its preference for scavenged food remains.

The Conservation Objectives Supporting Document for the River Nanny SPA has recorded significant congregations of four SCI species roosting at high tide at two distinct locations near the Plan boundary. One of these is north of the Nanny Estuary mouth at Laytown Beach North¹⁰ and one is in the inner estuary at Delaney's Cottage¹¹.

Similarly to the Boyne Estuary SPA, the lack of the overlap of the LAP and the SPA does not mean that there is no interaction. Any policies or objectives in the LAP that could cause increased levels of disturbing activities along the shoreline may have a potential impact on the integrity of the bird populations. The Supporting Document identified several types of disturbing activity including walking (with/without dogs), power boating and water skiing, motor vehicles, horse riding and shooting. Walking (with/without dogs) pose the highest level of impact in terms of frequency, intensity and response and occurred both to the north and south of the mouth of the Nanny.

Regarding effects to SPA populations outside the European site boundary, no records of use of the grassland fields at high tide were revealed by the consultation exercise with local birdwatchers. Five of the six SCIs are species whose diet includes grassland

⁹ River Nanny Estuary and Shore SPA Conservation Objectives Supporting Document Version 1.0 (NPWS, 2012). Available online at <http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO004158.pdf>

¹⁰ "Laytown North" Irish Wetland Bird Survey subsite (code OVLV07): Oystercatcher [Peak roost 145; 21% of population for which site designated], Ringed Plover [Peak roost 187; >100% population for which site designated], Sanderling [Peak roost 280; >100% population for which site designated].

¹¹ "Delaney's Cottage" Irish Wetland Bird Survey subsite (code OVL08): Golden Plover [Peak count 40; 2% of SPA Population for which site is designated].

invertebrates could occur in fields within the Plan area¹², if field characteristics including grass sward, field size, and low disturbance make them suitable for feeding or roosting. Only Sanderling is an exclusively coastal species, and would not occur inland.

As noted above, the importance of any given field is likely to be subject to change seasonally, and between years due to a variety of factors, and because bird conservation management agreements are unlikely to be in place with landowners in such undesignated sites. Whilst it is likely that there will be no significant effects to SPA populations resulting from changes to farmlands within the Plan area, this is based upon absence of any evidence and therefore the use of the inland fields cannot be ruled out. It is unlikely that significant flocks of birds use these fields on regular occasions as more records would be likely to exist.

3.3.4 Dundalk Bay SPA

The SPAs overlapping and adjacent to the Plan area share several SCI species with more distant wetland SPAs. For instance, the River Nanny SPA and Boyne Estuary respectively share five and eight SCI species with Dundalk Bay SPA (4026) located 15km to the north of the Plan area. The extent of landscape-scale bird movements between distant wetland sites is poorly understood. However, the spatial separation of Dundalk Bay from the Nanny/Boyne estuaries reduces the likelihood of birds regularly flying between them in significant numbers (e.g. following a disturbance event). Due to the benefits from reduced energy expenditure, birds disturbed at the Boyne estuary are more likely to travel 5km south to the Nanny Estuary, rather than fly 15km northwards to Dundalk Bay. There are therefore unlikely to be significant secondary effects on Dundalk Bay arising from wetland bird disturbance at either the Nanny or Boyne estuaries.

Flocks of Light-bellied Brent Goose regularly feed in a large grassland field to the south of the Boyne estuary near Mornington, between Church Road and the R151 (a peak count of 300 birds has been recorded). This field is outside the Plan area and will not be directly affected. The geese feeding here are therefore also outside the potential zone of influence of any indirect effects from human activity within the Plan area. For this reason, nearby SPAs designated for Brent Goose (e.g. Malahide Estuary SPA (4025)) are not likely to be significantly affected and were excluded from the Appropriate Assessment.

3.3.5 Boyne Coast and Estuary cSAC

Analysis of the boundaries of this European Site show that there are areas of overlap between the LAP boundary and the European site boundary, in the area around the dunes at Mornington and further north at Lady's finger and the Beacon. These habitats (according to the Conservation Objectives Supporting Document¹³) include:

- Salt marsh habitats around the mouth and lower reaches of the Mornington Stream (including Annex I habitats Atlantic salt meadows);
- Atlantic Salt meadows in a salt marsh mosaic at mouth of the Donacarney stream;
- Fixed dune habitat at the dunes in East Mornington;

¹² Oystercatcher, Ringed Plover, Golden Plover, Knot, Herring Gull.

¹³ NPWS (2012) Boyne Coast and Estuary SAC (site code: 1957) Conservation objectives supporting document - marine habitats Version 1 September 2012

- Dune slacks located to the east of the “Car Park” near the lighthouse.

All dune habitats were rated as being unfavourable-inadequate due to the effects of drying out and trampling. Salt marsh habitat was also deemed to be unfavourable-inadequate primarily due to the effects of invasion by Common Cordgrass (*Spartina*).

The primary threat to the dunes is from unmanaged movements of pedestrians and car parking. Both lead to erosion of the dunes vegetation which exposes the underlying sand which is sensitive to more anthropogenic and aeolian erosion – resulting in “blow-outs” or large areas of exposed sand in the dunes. It is one of the Conservation Objectives of the cSAC that bare ground in this habitat should not exceed 10%.

Meath County Council is currently addressing this problem by a series of dune stabilisation initiatives in consultation with the National Parks and Wildlife Service (L. Guinan MCC pers. Comm and A. Lynch NPWS pers. comm).

Policies and Objectives in the Plan that could promote further use of the dunes and beaches at Mornington for recreation could have an adverse effect on the integrity of the European site. This was taken into account in the assessment of the Draft Plan.

3.3.6 River Boyne and Blackwater cSAC

Qualifying interests for this cSAC are primarily inland, rather than coastal species and indeed the cSAC boundary is upstream of the LAP lands in the River Boyne between Beaulieu and Stameen. There are no SSCOs and no Supporting Documentation for this cSAC.

The LAP lands and the cSAC do not overlap but there are potential linkages between the two areas. Alluvial forests, one of the qualifying interests of the cSAC, are located upstream of Drogheda town and are unlikely to be affected by the LAP either directly or indirectly. Alkaline fens are located in the upper catchment and similarly are unlikely to be directly or indirectly affected except in the case of significant increases in water abstraction from the river. Aquatic species such as Salmon *Salmo salar* and Otter *Lutra lutra* and to a certain extent River Lamprey *Lampetra fluviatilis* are sensitive to water quality and therefore would be vulnerable to adverse effects of contamination from construction site run-off or poor wastewater treatment discharges.

Wastewater from the settlements of Mornington East, Bettystown, Laytown, Donacarney and Mornington is currently pumped to the Drogheda Wastewater Treatment Plant for treatment and final disposal. Data provided in the Draft LAP indicates that there is adequate treatment capacity for projected increases in populations.

3.4 Conservation Objectives

The E.C. Habitats and Birds Directives require the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. All five sites that are the focus for this Appropriate Assessment have Site-Specific Conservation Objectives (SSCOs). As a general rule, these all share a common aim to maintain or restore the favourable conservation condition of the species and habitats within the site. Qualifying interests for these sites are listed in in Appendix A.

For each of the SSCOs, there are a series of attributes, measures and targets. This allows the assessment to be focused upon the relationship between the targets of the SSCO and the results of implementing the Local Area Plan. If the two are in conflict then there may be a risk of loss of integrity if the SSCO target cannot be reached. The aim therefore was to avoid any such conflicts during the preparation of the Plan.

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.

The following documents were used to refer to the SSCOs for each European site:

NPWS (2011a) **Dundalk Bay Special Protection Area** (Site Code 4026) Version 1 Conservation Objectives Supporting Document. National Parks & Wildlife Service March 2011

NPWS (2011b) **Conservation objectives for River Boyne and River Blackwater SAC** [002299]. Generic Version 3.0. Department of Arts, Heritage & the Gaeltacht.

NPWS (2011c) Conservation objectives for **River Boyne and River Blackwater SPA** [004232]. Generic Version 4.0. Department of Arts, Heritage & the Gaeltacht.

NPWS (2012) **Boyne Coast and Estuary SAC** (site code 1957) Conservation objectives supporting document -coastal habitats NPWS Version 1 August 2012

NPWS (2012a) **River Nanny Estuary & Shore Special Protection Area** (Site Code 4158) Conservation Objectives Supporting Document VERSION 1 National Parks & Wildlife Service September 2012.

NPWS (2012b) Conservation Objectives: **River Nanny Estuary and Shore SPA** 004158 Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. September 2012

NPWS (2012c) Conservation Objectives: **Boyne Coast and Estuary SAC 001957**. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage & the Gaeltacht.

NPWS (2012d) **Boyne Coast and Estuary SAC** (site code: 1957) Conservation objectives supporting document - marine habitats Version 1 September 2012

NPWS (2012e) **Boyne Estuary Special Protection Area** (Site Code 4080) Conservation Objectives Supporting Document VERSION 1 National Parks & Wildlife Service December 2012

NPWS (2013f) Conservation Objectives: **Boyne Estuary SPA** 004080. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

These represented the most up-to-date documents for the European sites at the time of publication of the Local Area Plan and this NIR.

It has not been deemed necessary to reproduce every measure, target and attribute stated in these documents during the preparation of this NIR. All measures were referred to during the assessment process, but in order to produce a focussed and concise NIR, it was decided to only refer to specific measures when deemed helpful and appropriate.

SSCOs for the SPA selection species focused on the following aspects of the species' ecology:

Population trend - which should be stable or increasing in the long term. Therefore any consequences of implementing the Draft Plan that could affect population viability, *e.g.* disturbance, loss of feeding and roosting sites could threaten this SSCO.

Distribution - There should be no significant increase in the range, timing or intensity of use so far as by the various selection species other than that occurring from natural patterns of variation.

SPAs also protect the wetland habitat used by birds and the relevant SSCO requires that the permanent area occupied by the wetland habitat should be stable and not significantly less than the area stated in the documentation. Natural process such as coastal erosion and deposition are noted to be exceptions to this target.

Some species that have been studied to a higher level of detail are addressed in the SSCO with additional attributes, measures and targets that generally reflect a more detailed understanding of the threats to the species itself.

Similarly, for habitats covered by the cSAC designation, there are common set of attributes that are found in several of the SSCO:

Habitat Area - which should be stable or increasing in the long term. Therefore any consequences of implementing the Draft Plan that could affect the physical area of habitats either directly or indirectly through increased trampling, grazing or erosion for example, could threaten this SSCO.

Community Distribution - the target is generally to maintain the current area in a natural condition.

Additional targets may be applied to some habitats where the physical structure or the vegetation structure is a key element of the value of the habitat.

3.5 Protective Policies and Objectives of Meath County Development Plan 2013-2019.

The AA of the Draft Local Area Plan involved the analysis of the proposed policies and objectives and where necessary, the inclusion of mitigation measures to ensure that the implementation of the Draft Plan does not result in adverse impacts on European sites. In doing so, there were several "protective" policies and objectives that existed at a higher level of planning – the County Development Plan (CDP) - whose specific function was to protect the integrity of the sites and the environmental conditions underpinning them. These were taken into account in the AA of the Draft Local Area Plan as these protective policies in the CDP could help to mitigate any potential impacts on designated sites.

Table 6 below show a summary of the Policies and Objectives contained within the Meath County Development Plan 2013-2019 which act cumulatively to protect the individual European sites. This list does not cover all of the Policies or Objectives of a protective or mitigatory nature but identifies those that address specific sensitivities of the sites.

Only the six sites that are deemed to be relevant to the Local Area Plan are included but reference to the NIR for the CDP provides a list of policies for all European sites within the County.

Table 6: Policies in the Meath County Development Plan 2013-2019 protecting individual Natura 2000 sites.

Site	Sensitivity/threat	Mitigation Policy/Objective
Candidate SPECIAL AREAS OF CONSERVATION		
Boyne Coast and Estuary	<ul style="list-style-type: none"> Water quality Changes in coastal geomorphology 	ED OBJ 2; ED POL 10; ED POL 11; ED POL 40; TRAN OBJ 2; TRAN OBJ 8; TRAN OBJ 9; TRAN POL 32; WS SO 7; WS SO 8; WS POL 11; WS OBJ 13; WS OBJ 15; EC POL 23; NH POL 5; NH OBJ 2; NH OBJ 3; RUR DEV SO 9
River Boyne and Blackwater	<ul style="list-style-type: none"> Groundwater changes near alkaline fens Direct and indirect impacts on alluvial forests Disturbance of otter holts Instream obstructions affecting fish passage 	ED OBJ 2; ED POL 40; TRAN OBJ 8; TRAN OBJ 9; TRAN POL 32; WS SO 7; WS SO 8; WS POL 2; WS POL 11; WS OBJ 8; WS OBJ 15; EC POL 23; NH POL 5; NH OBJ 2; RUR DEV SO 9; RD POL 18; RD POL 21; RD POL 52; RD POL 53

Site	Sensitivity/threat	Mitigation Policy/Objective
SPECIAL PROTECTION AREAS		
Boyne Estuary	<ul style="list-style-type: none"> Disturbance from recreation/development 	ED OBJ 2; ED POL 9; ED POL 40; TRAN OBJ 2; TRAN OBJ 8; TRAN OBJ 9; TRAN POL 32; WS SO 7; WS SO 8; WS POL 11; NH POL 5; NH OBJ 2; RUR DEV SO 9
River Nanny Estuary and Shore	<ul style="list-style-type: none"> Disturbance from recreation/development Water quality. 	ED OBJ 2; ED POL 9; ED POL 40; TRAN OBJ 8; TRAN OBJ 9; TRAN POL 32; WS SO 7; WS SO 8; WS POL 11; WS OBJ 8; WS OBJ 13; WS OBJ 15; NH POL 5; NH OBJ 2; RUR DEV SO 9; RD POL 18; RD POL 21
River Boyne and Blackwater	<ul style="list-style-type: none"> Disturbance from recreation/development Water quality 	ED OBJ 2; ED POL 40; ED OBJ 10; TRAN OBJ 2; TRAN OBJ 8; TRAN OBJ 9; TRAN POL 32; WS SO 7; WS SO 8; WS POL 11; WS OBJ 8; WS OBJ 15; NH POL 5; NH OBJ 2; RUR DEV SO 9; RD POL 18; RD POL 21; RD POL 52; RD POL 53
Dundalk Bay SPA	<ul style="list-style-type: none"> Indirect effects on shared metapopulations 	ED OBJ 2; ED POL 9; NH POL 5

3.6 Likely Effects of the Plan on European Sites

3.6.1 Policy Guidance during preparation of the Draft Plan

A Policy Guidance Note was prepared at the commencement of the preparation of the Draft Local Area Plan to help those preparing the Draft Plan in avoiding adverse impacts on European sites. Avoidance of impacts during the early stages of drafting Policies and Objectives is regarded to be the most efficient method of mitigating any potential adverse impacts.

The Guidance Note provided advice to the Council that would allow impacts on the European sites to be avoided. If avoidance was not always possible then the potential adverse impact could be further mitigated by adding caveat or protective Policies.

3.6.2 Identification and Assessment of Likely Significant Effects

In November 2013, Meath County Council prepared and revised several versions of the Draft Local Area Plan. The Appropriate Assessment consultants, in conjunction with the SEA consultants, reviewed these draft Chapters and provided feedback on the Policies, Objectives and supporting text. Two iterative reviews were carried out by the Appropriate Assessment team and recommendations were forwarded to the Council after each review to allow them to consider the proposed changes. The output was the final version of each Section of the Draft Plan that contained amended policies/objectives and mitigation measures specifically designed to address impacts on European sites.

The application of the Policy Guidance Note by the Council meant that the majority of the policies and objectives did not pose any likely significant effect on the European sites and therefore were not subject to further scrutiny in the AA process. Table 7 only lists the policies and objectives that did pose a risk of adverse effects and hence required mitigation.

Table 7 presents the key changes that were made to the policies and objectives as a result of the AA of the initial drafts of the chapters of the Draft Local Area Plan. It shows how specific policies and objectives of the Draft Local Area Plan were deemed to pose likely significant effects to European sites. It also shows how these policies/objectives were then amended to avoid, reduce or minimise the potential adverse effects. These are the key mitigation measures that are included in the Draft Plan that went on display as a consequence of the AA process.

The assessment process included identifying where likely significant effects of the Draft LAP could be addressed after taking the CDP “protective” policies into account. This allowed several Draft LAP policies that otherwise would have raised issues of potential impacts, to be addressed by the CDP. If the CDP policies were not deemed to provide enough clarity that significant effects could be ruled out, then a potential “residual” impact was deemed to be present and the Draft Plan policy or objective would have to be modified.

Only impacts that could affect the Conservation Objective(s) being reached were considered as part of the assessment, in accordance with Article 6(3) of the E.C. Habitats Directive.

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Table 7: Aspects of the Draft Local Area Plan and how they were mitigated as a result of the Appropriate Assessment process.

<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
SE POL 5: To capitalise on the presence of the railway station at Laytown and bus corridors throughout the plan area. Developing and implementing a cycle and pedestrian strategy to facilitate pedestrian and cyclist movements throughout the plan area.	Location of Laytown railway station close to the River Nanny and Shore SPA meant that impacts of disturbance to birds could not be ruled out.	Addressed by protective policies in the CDP and the Draft LAP (ROS OBJ 1, TM OBJ 11, and TM POL 19). No changes required.	No changes required.
EED POL 5: To promote and facilitate synergy between natural heritage, retail and tourism developments that lead to employment creation and investment in the plan area.	General policy that promotes tourism and retail in the context of natural heritage which has the potential to cause a range of impacts ranging from direct habitat loss to indirect disturbance of birds and habitats.	Covered by all relevant protective policies in the CDP and also in the Draft LAP. No changes required.	Insertion of text in red. EED POL 5: To promote and facilitate synergy between natural heritage, retail and tourism developments that lead to employment creation and investment in the plan area at appropriate locations. No other changes required.
TD POL 10 To integrate the cycling and walking policies and objectives as indicated within the Green Infrastructure and Transport and Movement sections of the plan and how these strategies can optimise the inherent tourism potential of the plan area.	General policy that promotes cycling and walking, which in the context of these taking place close to or within European sites, has the potential to cause a range of impacts ranging from direct habitat loss to indirect disturbance of birds and habitats.	Covered by all relevant protective policies in the CDP and also in the Draft LAP. No changes required.	No changes required.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
TD POL 11: To develop the coast as a nature/tourist resource by improving the approach to the Meath Gold Coast and creating a way marked trail/drive along the coastline, providing clear links with the main tributaries and adequate parking and visitor facilities in conjunction with Fáilte Ireland, Tourism Ireland, Meath Tourism, Boyne Valley Tourism and any other relevant bodies.	Policy was rather broad and could, in isolation, give rise to a range of impacts on designated sites if parking and visitor facilities are in the wrong place. Whilst there are protective policies requiring AA of these proposals in the CDP, it is not possible to guarantee that there are suitable places for these facilities.	Amended text in red: TD POL 11: To develop the coast as a nature/tourist resource by improving the approach to the Meath Gold Coast and creating a way marked trail/drive along the coastal strip , providing clear links with the main tributaries and adequate parking and visitor facilities in conjunction with Fáilte Ireland, Tourism Ireland, Meath Tourism, Boyne Valley Tourism and any other relevant bodies in appropriate locations that will not have any adverse effects on the ecological sensitivities of the area.	Mitigation Measure incorporated into the Adopted Plan.
TVC POL 5: To promote and facilitate the provision of additional cafés, bars, restaurants, gift/tourist shops and beach sports equipment rental in the town centre, particularly on the seafront in order to attract tourists to the town centre area.	Specific reference to developments "on the seafront". These can give rise to light spill, noise and disturbance which could adversely affect birds using the pNHA area beach for roosting at night. These bird populations are linked to the SPAs north and south.	Amended text in red: TVC POL 5: To promote and facilitate the provision of additional cafés, bars, restaurants, gift/tourist shops and beach sports equipment rental in the town centre, particularly on the seafront in order to attract tourists to the town centre area.	Mitigation Measure incorporated into the Adopted Plan.
TVC OBJ 1: To prepare a Bettystown Public Realm Enhancement Programme seeking to improve the public realm, movement in the traditional town centre and pedestrian linkages between Bettystown Town Centre and the coast, subject to available resources.	Could increase disturbance of coastal habitats and species if the Programme focused on increasing access to the shoreline.	Covered by all relevant protective policies in the CDP and also in the Draft LAP. No changes required.	No changes required.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
ROS POL 9: To ensure that existing and proposed residential developments and amenity areas link effectively with each other through the provision of safe pedestrian links, footpaths and appropriate lighting.	This could be construed as providing lighting between residential areas and the beach which could lead to impacts of light spill on roosting birds, especially during high tides.	Amended text in red ROS POL 9: To ensure that existing and proposed residential developments and amenity areas link effectively with each other through the provision of safe pedestrian links, footpaths and appropriate lighting. All lighting proposals within 100m of a Natura 2000 site, or those deemed to have potential to result in adverse impacts, must undergo AA Screening.	Mitigation Measure incorporated into the Adopted Plan.
ROS OBJ 1: Relocate commuter parking from the Laytown seafront to the west of Laytown Train Station to enable the reinstatement of the public amenity lands at Laytown, subject to available funding.	There could be impacts of disturbance during removal of existing car park, construction of new car park and control of run off from large impermeable surface close to the SPA and tributary leading to the SPA.	Amended text in red: ROS OBJ 1: To relocate commuter parking from the Laytown seafront and from Alverno Terrace to the west of Laytown Train Station to enable the reinstatement of the public amenity lands at Laytown, subject to available funding. All aspects of the proposal will undergo screening for AA in the context of impacts on the River Nanny and Shore SPA.	Mitigation Measure incorporated into the Adopted Plan.
WSU POL 3: To co-operate with Irish Water and Louth County Council in implementing the key findings and recommendations of the East Meath, South Louth and Drogheda Water Improvement Scheme Report (July 2009), for a water supply scheme to meet the anticipated water requirements to serve this area.	Scheme is not thought to have undergone AA Screening or full AA therefore there is no data on potential for likely significant effects.	Amended text in red: WSU POL 3: To co-operate with Irish Water and Louth County Council in implementing the key findings and recommendations of the East Meath, South Louth and Drogheda Water Improvement Scheme Report (July 2009), for a water supply scheme to meet the anticipated water requirements to serve this area. All such plans or projects will be subject to SEA and AA, as required.	Mitigation Measure incorporated into the Adopted Plan.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
WSU POL 14: To consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible. The Planning Authority will, in general, retain a strip of 10 metres on either side of such channels.	Whilst this is a protective policy, limiting the 10m buffer to OPW-managed channels may not prevent impacts on other watercourses that may have fisheries importance or be pathways to the cSAC/SPA. Protective policies are in place in the CDP (WS POL 25, WS OBJ 15) but are not as specific.	Amended text in red: WSU POL 14: To consult with the OPW in relation to proposed developments in the vicinity of drainage channels and rivers for which the OPW are responsible. The Planning Authority will, in general, retain all vegetation retain within a strip of 10 metres on either side of such channels and other watercourses which flow into the Natura 2000 sites in order to help protect the water quality in these channels.	Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 2: Facilitate the provision of an east-west road linking Bettystown Town Centre to the proposed new rail station to the west.	The risk of birds using these lands is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 2: To facilitate the provision of an east-west road linking Bettystown Town Centre to the proposed new rail station to the west. The location of the route is indicative and will be influenced by further environmental surveys.	Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 4: Reserve lands for a major distributor road linking the southern end of the north-south spine road to the R150 west of Laytown.	The risk of birds using these lands is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 4: To reserve lands for a major distributor road linking the southern end of the north-south spine road to the R150 west of Laytown. The location of the route is indicative and will be influenced by further environmental surveys.	TM OBJ 4 removed.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
TM OBJ 6: Reserve access to lands from the established residential development to the east (Brabazon) and to facilitate future access to/from lands to the north.	The risk of birds using these lands is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 6: To reserve access to lands from the established residential development to the east (Brabazon) and to facilitate future access to/from lands to the north. The location of the access is indicative and will be influenced by further environmental surveys.	Renamed as TM OBJ 5. Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 7: Facilitate the provision of a link road between Narrowways and the new eastwest link road.	The risk of birds using these lands is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 7: To facilitate the provision of a link road between Narrowways and the new east west link road (TM OBJ 2). The location of these routes is indicative and will be influenced by further environmental surveys.	Renamed as TM OBJ 6. Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 8: Eliminate vehicular parking on Bettystown Beach.	May force parking in even more sensitive areas in other designated sites e.g. Mornington, Laytown. Cannot rule out indirect effects of this policy on other European sites.	Amended text in red: TM OBJ 8: To assess the feasibility of eliminating parking from Bettystown Beach.	Renamed as TM OBJ 7. Mitigation Measure incorporated into the Adopted Plan.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
TM OBJ 9: Reserve a strategic road corridor linking the R 132-M1 link road at Colpe Cross via Donacarney and Bettystown to the Coast Road (R150) via a new distributor road link from the extended Eastham Road to the Golf Links Road.	The risk of birds using these lands is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 9: To reserve a strategic road corridor linking the R 132-M1 link road at Colpe Cross via Donacarney and Bettystown to the Coast Road (R150) via a new distributor road link from the extended Eastham Road to the Golf Links Road. The location of the route is indicative and will be influenced by environmental surveys.	Renamed as TM OBJ 8. Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 11: Facilitate the development of a park and ride facility to the west of the railway bridge to serve Laytown Train Station with improved pedestrian linkages to Laytown.	As per ROS OBJ 1. There could be impacts of disturbance during removal of existing car park, construction of new car park and control of run off from large impermeable surface close to the SPA and tributary leading to the SPA.	Amended text in red: TM OBJ 11: To facilitate the development of a park and ride facility to the west of the railway bridge to serve Laytown Train Station with improved pedestrian linkages to Laytown. All aspects of the proposal will undergo screening for AA in the context of impacts on the River Nanny and Shore SPA.	Renamed as TM OBJ 10. Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 13: Reserve access points onto Laytown Beach.	There is no evidence known to exist at present that the current access points pose a risk to the integrity of the site but additional text could help to prevent the "reserve" becoming developed in a manner that would increase pedestrian access to the beach.	Amended text in red: TM OBJ 13: To reserve access points onto Laytown Beach, taking into account the ecological sensitivities of the River Nanny Estuary and Shore SPA.	Renamed as TM OBJ 12. Mitigation Measure incorporated into the Adopted Plan.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
TM OBJ 14: Facilitate the provision of a through-road from the Garra Road to the Bettystown Road along the south-east development boundary together with pedestrian and cycle routes linking the Garra Road with the Bettystown Road and the lands zoned G1.	The risk of birds using these lands is thought to be low but currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 14: To facilitate the provision of a link road connecting the Garra Road to the Bettystown Road (R150) and the Colpe Road. This link will include quality footpaths and cycleways. The location of the route is indicative and will be influenced by further environmental surveys.	Renamed as TM OBJ 13. Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 16: To realign the Garra Road and improve linkages along the Garra road between Mornington East and Donacarney.	The risk of birds using these lands is thought to be low but is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 16: To realign the Garra Road and improve linkages along the Garra road between Mornington East and Donacarney. This realignment will be influenced by further environmental surveys.	Renamed as TM OBJ 15. Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 18: Improve linkages along the R150 between Laytown and Julianstown.	If proposal resulted in road widening then only way it can pass AA test is to widen it on the north side.	Amended text in red: TM OBJ 18: To improve linkages along the R150 between Laytown and Julianstown. All aspects of the proposal will undergo screening for AA in the context of impacts on the River Nanny and Shore SPA.	Renamed as TM OBJ 17. Mitigation Measure incorporated into the Adopted Plan.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
TM OBJ 22: To improve linkages along the R 151 between Mornington East and Mornington.	The risk of birds using these lands is thought to be low but is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 22: To improve linkages along the R 151 between Mornington East and Mornington. These linkages will be influenced by further environmental surveys.	Renamed as TM OBJ 21. Mitigation Measure incorporated into the Adopted Plan.
TM OBJ 23: To improve linkages along the R150 between Mornington and Drogheda.	The risk of birds using these lands is thought to be low but is currently unknown and could cause indirect impacts on SPA populations if the route of the road leads to loss of feeding and roosting habitat of SPA populations. However there is no indication that these lands are known to be significant areas for these populations.	Amended text in red: TM OBJ 23: To improve linkages along the R150 between Mornington and Drogheda. These linkages will be influenced by further environmental surveys.	Renamed as TM OBJ 22. Mitigation Measure incorporated into the Adopted Plan.
TM POL 18: To facilitate and encourage the upgrading of Laytown Train Stations, and protect as required lands needed for the upgrading of existing railway lines and stations or the provision of new railway stations throughout the County. Any such proposals for developments in Bettystown and south of Drogheda will have to ensure that there are no adverse effects on the integrity of SPAs.	In reality this path can only be constructed on north side of road as there is no room on the south side. This would prevent widening into the SPA and avoid risking disturbance of birds.	Amended text in red: TM POL 18: To facilitate and encourage the upgrading of Laytown Train Stations, and protect as required lands needed for the upgrading of existing railway lines and stations or the provision of new railway stations throughout the County. Any such proposals for developments in Bettystown and south of Drogheda will have to ensure that there are no adverse effects on the integrity of Natura 2000 sites.	Mitigation Measure incorporated into the Adopted Plan.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
(Refer to Meath CDP 2013-2019 TRANS OBJ 2).		(Refer to Meath CDP 2013-2019 TRANS OBJ 2).	
TM POL 20: To facilitate the provision of park and ride facilities to cater for commuters using Laytown Train Station.	There could be impacts of disturbance during removal of existing car park at Laytown, construction of new car park and control of run off from large impermeable surface close to the SPA and tributary leading to the SPA.	Amended text in red: TM POL 19: To facilitate the provision of park and ride facilities to cater for commuters using Laytown Train Station and to deter long term parking from Alverno Terrace. All aspects of the proposal will undergo screening for AA in the context of impacts on the River Nanny and Shore SPA.	Mitigation Measure incorporated into the Adopted Plan.
GI POL 9: To promote the usage of the coast and riverbanks as leisure areas in order to enhance the potential of the coast and rivers as actively used amenity areas.	Strongly promotes use of coast and riverbanks as leisure amenities which is in conflict with some HER policies and objectives. Policy as written cannot pass the AA test as it may not be implementable without adverse effect.	Policy removed.	No changes required.
GI POL 10: To recognise the importance of the coastal sand dune system and beach as recreational and tourist assets, and pursue their protection or development for recreational use.	Strongly promotes use of sand dunes as amenities which is in conflict with some HER policies and objectives. Policy as written cannot pass the AA test as it may not be implementable without adverse effect. Directly conflicts with the conservation objectives in the cSAC.	Policy removed.	No changes required.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
GI POL 11: To develop river corridors as natural amenity corridors, connecting the different parts of the plan area and linking up with established amenity areas whilst ensuring that the qualifying interests of the Natura 2000 sites are protected. This would include potential amenity walks along the River Nanny and the proposed Boyne Greenway extension to Mornington.	Whilst protection of the Natura 2000 sites is identified, the wording suggests that this is possible in all cases, whereas the narrow nature of some remaining riparian zones may prevent both walks and protection being possible.	Amended text in red: GI POL 9: To recognise and investigate the use of river corridors as natural amenity corridors, connecting the different parts of the plan area and linking up with established amenity areas whilst ensuring that the qualifying interests of the Natura 2000 sites are protected. This would include potential amenity walks along the River Nanny and the proposed Boyne Greenway extension to Mornington. Protection of the natural environment and adherence to GI POL 7 will be prioritised during the preparation of design and implementation of proposals.	Mitigation Measure incorporated into the Adopted Plan.
GI POL 12: To encourage the provision of both pedestrian and cycle access to the coast and riverbanks and to reserve lands free from development to facilitate such access.	Prefer removal of policy as it suggests that lands should be kept free from development to allow human access. This may threaten the conservation objectives for several qualifying interests in the cSAC and SPA that are sensitive to increased human disturbance and trampling.	Policy removed.	No changes required.
GI POL 13: To increase the quality of beaches and in so doing contribute to the development of the tourism industry and to the enjoyment of the facilities.	Improving beach quality and promoting increased usage by tourists can, in the wrong locations, cause adverse impacts on sensitive habitats and species.	Amended text in red: GI POL 10: To increase the quality of beaches and in so doing contribute to the development of the tourism industry and to the enjoyment of the facilities, whilst balancing it with the sensitivities of the environment and ensuring that there are no adverse effects on the integrity of the Natura 2000 sites.	Mitigation Measure incorporated into the Adopted Plan.

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<i>Section/Policy/Objective in the Draft Plan prior to mitigation</i>	<i>Potential Likely Significant Impact on Conservation Objectives of European Sites.</i>	<i>Mitigation Measure incorporated into the Draft Plan</i>	<i>Mitigation Measure incorporated into the Adopted Plan</i>
GI POL 11: To develop the settlements in county Meath as green infrastructure hubs linked to each other and the coastline by existing corridors such as rights of way in public ownership, walking trails, cycling routes and disused railway lines and river corridors to link with the coast and selected historic demesnes.	General policy that promotes linkages between settlements including cycle paths and footpaths and river corridors – all of which have the potential to cause a range of impacts ranging from direct habitat loss to indirect disturbance of birds and habitats.	Covered by all relevant protective policies in the CDP and also in the Draft LAP. No changes required.	No changes required.
GI OBJ 2: To improve connectivity for people through the provision of an integrated network of open spaces, pocket parks, linear parks and green routes throughout Plan area which ultimately link with the coastal area.	General policy that promotes connectivity for people through provision of open space. Whilst these may function as ecological corridors in some cases, they may also channel people to areas that are sensitive to disturbance or trampling.	Covered by all relevant protective policies in the CDP and also in the Draft LAP. No changes required.	No changes required.

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In all of the cases listed above, the proposed and accepted amendments to the text and maps were judged to be enough to rule out any residual likelihood that there would be adverse effects on the integrity of any of the European sites.

Table 7 lists the policies that were deemed to pose a likely significant effect on the European sites prior to their mitigation. Table 8 below lists those policies which were deemed to provide a level of protection to European sites. Table 8 demonstrates that the adopted Plan provides comprehensive protection of all six sites that were deemed to be within the zone of influence of the plan.

Table 8: Draft Local Area Plan Policies and Objectives that provide protection of European Sites.

Policy/Site	Boyne Estuary SPA	Boyne Coast and Estuary cSAC	River Boyne and Blackwater cSAC	River Boyne and Blackwater SPA	River Nanny Estuary and Shore SPA	Dundalk Bay SPA
SH POL 2						
SH POL 3						
TD POL 5						
TD POL 7						
TD POL 13						
ROS POL 11						
WSU POL 11						
WSU POL 12						
WSU OBJ 4						
WSU POL 13						
WSU POL 14						
WSU POL 24						
WSU OBJ 6						
WSU OBJ 7						
WSU OBJ 8						
WSU OBJ 9						
WSU OBJ 10						
WSU POL 25						
WSU POL 26						
WSU POL 27						
WSU POL 28						
TM OBJ 7						
TM OBJ 9						
TM OBJ 25						

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Policy/Site	Boyne Estuary SPA	Boyne Coast and Estuary cSAC	River Boyne and Blackwater cSAC	River Boyne and Blackwater SPA	River Nanny Estuary and Shore SPA	Dundalk Bay SPA
TM POL 18						
HER POL 1						
HER POL 3						
HER OBJ 1						
HER OBJ 2						
HER OBJ 3						
HER OBJ 4						
HER OBJ 5						
HER POL 5						
HER POL 6						
HER POL 7						
HER POL 9						
HER OBJ 7						
HER OBJ 8						
HER OBJ 10						
GI POL 1						
GI POL 2						
GI POL 3						
GI POL 4						
GI POL 5						
GI POL 6						
GI POL 7						
GI POL 8						
GI POL 9						
GI POL 12						
GI POL 13						
GI OBJ 1						
GI OBJ 3						
GI OBJ 4						
GI OBJ 5						
GI OBJ 6						

3.7 Screening of Submissions and Manager's Recommendations made on the Proposed Draft Plan

The Proposed Draft Plan went on public display from 13th December 2013 to 3rd February 2014 inclusive. A total of 105 submissions were received during the draft consultation phase. A Manager's Report was prepared following the end of the public display period. This Report summarised the issues raised in the submission, detailed the Manager's response to the issue and recommendations from the Manager to make alterations, where deemed necessary, to the Proposed Draft Plan. The submissions and the proposed recommendations to make alterations were "screened" for any likelihood of significant effects on European sites.

The following alterations were proposed and had relevance to the Natura 2000 sites, but could be screened out from a requirement for further assessment for the reasons given:

1. *Request that reference to Sand yachting and Kitebuggying be included within the LAP (Specifically on page 70 and 48 of the Draft LAP).*
 - a. The Manager recommended inclusion of phrases in the supporting text to refer to these activities. Protective policies in the rest of the LAP would safeguard against an unsustainable escalation of activities that could disturb roosting and feeding birds.
2. *Angling is a popular recreational pastime. With the vast amount of angling waters available, the plan should provide for the development of facilities to encourage anglers to access this valuable natural resource.*
 - a. The Manager recommended including supportive text into the written statement with additional text stating "*subject to the need for an AA and an assessment of potential environmental impacts.*"
3. Request to include proactive policy on Invasive Species under Green Infrastructure. For example, 'To prohibit invasive species from inclusion in landscape design proposals'.
 - a. The Manager highlighted the protective policies in the Green Infrastructure Strategy in the CDP that address invasive species but also recommended the inclusion of **GI POL 13: 'To promote the use of native species in landscaping proposals'.**
4. Proposal for a birdwatch area to be provided at habitation on the west side of the railway.
 - a. The Manager recommended that a new objective be introduced into Section 4.6 (Recreation & Open Space Policies & Objectives) **ROS OBJ 5: To investigate & identify a suitable location for the development of a bird watch facility in the coastal area in conjunction with the review of the Meath County Biodiversity Plan. Consultation with the National Parks & Wildlife Service on such a proposal will be required having regard to the coastal area being within a Natura 2000 site. Any bird watch development proposal shall be screened for the need to undertake an Appropriate Assessment.**

None of the Manager's proposed alterations to the Proposed Draft Plan were deemed to pose any likelihood of significant effects on European sites. Environmental issues were adequately addressed through existing protective policies and objectives in the existing County Development Plan.

The Manager's Report, together with a SEA/AA screening of each proposed amendment, was considered by the Elected Members of Meath County Council at a Special Planning meeting.

Based on the screening exercise for SEA and AA, it was determined, in accordance with the requirement of Section 12 (7)(aa) of the Planning and Development Act 2000 (as amended), that the likely significant effects on the environment of implementing the proposed alterations, to the Proposed Draft Plan were not such that they required further Appropriate Assessment, as per the requirements of the relevant Directives.

3.8 Screening of Manager's Proposed Alterations and Submissions on Alterations during the Public Consultation Stage.

The Members of Meath County Council, having considered the Manager's recommendations resolved that the Draft Plan be altered. The proposed alterations constituted a material alteration of the Draft Plan to the Meath County Development Plan 2013-2019 and as a result, it was placed on public display from Tuesday, 13th May 2014 to Tuesday 10th June 2014 inclusive.

36 submissions were received during the public display period of the Material Alterations to the Proposed Draft Plan. Submissions made on the proposed alterations were also subject to AA Screening and this is contained within the Chief Executive Report on Proposed Amendments to the Draft East Meath Local Area Plan.

Submission No. E3004 Dept. of Arts, Heritage and the Gaeltacht raised the following issues which were considered by the AA team:

"Whilst the Department recognise that the County Development Plan and this draft Local Area Plan (LAP) contain policies and objectives to protect the natural heritage, consultation with the DoAHG may be necessary for projects or activities which arise out of the proposed amendments as outlined below.

- a. *Proposed Amendment 1 is to allow lands zoned high amenity to have permitted uses of cycleways/greenways/trail development, land and water based recreational activities, open space, cultural activities and uses open for consideration of kiosk, restaurant and tea rooms. The lands that are zoned high amenity include lands along the coast and River Boyne Estuary with nature conservation designations. Whilst recognising the importance of recreation uses, the above uses have the potential to cause habitat loss and additional disturbance to species. Therefore screening for appropriate assessment and an ecological impact assessment would be required. Cumulative impacts will also need to be assessed, particularly where greenways will form part of a larger network.*

Following consultation with the AA team, the Chief Executive considered that there were sufficient safeguards contained in the Draft Local Area Plan to fulfil this commitment to protecting the natural environment and biodiversity of the area (e.g. HER POL 3 and 4).

- b. Proposed Amendment 10 is to investigate and identify a suitable location for the development of a bird watch facility in the coastal area in conjunction with the review of the Meath County Biodiversity Plan. The Department notes that there will be consultation with the NPWS and that the Local Authority will carry out appropriate assessment screening of the proposed project.*

Following consultation with the AA team, the Chief Executive reconfirmed that any proposed development of a bird watch facility within the plan area would require consultation with the National Parks and Wildlife Service and require appropriate assessment screening to be carried out as per the requirements of proposed planning objective ROS OBJ 5.

There were no issues contained within the submissions on the alterations and the Manager's Response to them or the Elected Member's directions that warranted any requirement for Appropriate Assessment.

3.9 Interaction with other Plans

The E.C. Habitats Directive and the Irish Habitats Regulations 2011 require that the impacts on European sites be assessed from the plan or project in question and also in the presence of other plans and projects that could affect the same Natura 2000 sites.

The screening process identified the plans and projects that could act in combination with the Local Area Plan to pose likely significant effects on European sites. This Section identifies if these Plans have undergone an appropriate assessment themselves as it is assumed that if a Plan has been adopted following an AA then it cannot pose likely significant adverse effects on Natura 2000 sites.

The cumulative/in-combination impact assessment focused on the other County Development Plans and Local Area Plans that had the highest potential to affect the same European sites that could be affected by the Draft Local Area Plan 2013-2019. Other higher-level plans that could promote infrastructure are integrated within the Draft County Development Plan itself and have been assessed as such.

- Meath County Development Plan 2013-2019
 - The AA of the County Development Plan has addressed many of the potential issues arising from the Draft Local Area Plan. The current AA of the Local Area Plan relies heavily on the protective policies in the County Development Plan as a form of mitigation of potential effects on the European Sites. Therefore, assuming that both the County and Local Area Plan are implemented in accordance with the policies and objectives in both Plans then significant adverse effects on European sites will be avoided.

- Fingal County Development Plan 2011-2017
 - Potential for impacts from recreational users of the beach at the River Nanny and Shore SPA are acknowledged and policies integrated to the Plan to ensure the AA is carried out for such proposals. Cumulative impacts caused by increased populations in East Meath and in Fingal, on Rogerstown and Malahide Estuaries have been addressed by mitigation policies in the Fingal County Development Plan.
- Louth County Development Plan 2009-2015
 - The Boyne Estuary SPA, River Boyne and Blackwater cSAC and SPA are all shared by Louth and Meath. Policies have been assessed as part of a comprehensive appropriate assessment and changes made to protect these specific sites. As a result there are no predicted cumulative impacts from the implementation of this Plan.
- Dublin City Development Plan 2011-2017
 - There are no Natura 2000 sites shared by the two Counties. At the screening stage it was purported that there could be indirect impacts if bird populations in Meath SPAs were adversely affected (Shelduck, Black-tailed Godwit, Golden Plover and others).
 - Policies have been proposed to provide for protection of the coastal Natura 2000 sites in Dublin City that could share species with the River Nanny and Boyne Estuary sites in Meath. As a result there are no predicted cumulative impacts from the implementation of this Plan.
- Fingal and East Meath Flood Risk Assessment and Management Study SEA Environmental Report (2011)
 - This strategic analysis of flood risk and relief options identified potential for impacts on the River Nanny Estuary and Shore SPA and Boyne Estuary SPA as a result of embankment proposals at Laytown/Bettystown. It was recommended that the timing of the proposed works on the River Nanny Estuary take place between April and August to avoid the main bird migration and wintering period; the reduction of noise by using appropriate construction methods; and the setting back of the flood defences and road, or the creation of new intertidal habitat to mitigate for habitat likely to be lost through coastal squeeze.
- Eastern River Basin District Management Plan (2008)
 - A review of the Article 6 Assessment indicated that the Measures proposed within the Plan are consistent with the mitigation policies within the Draft County Development Plan. Key issues such as buffer strips alongside rivers, control of invasive species, upgrade and capacity of wastewater treatment plants lend support for the Policies in the Plan.

- Heritage Capital- Marketing Tourism in Meath 2005 – 2010
 - Whilst the Strategy does not appear to have undergone any AA, there are several recommendations that overlap with protective Policies in the Draft County Development Plan. Proposals to protect the beaches from parking and to provide adequate parking whilst respecting the need to protect the designated sites, is one such example.
 - It is noted that this Strategy was prepared in the peak of the Celtic Tiger era and that pressures to develop hotel and leisure developments are no longer viable. Such developments could have posed a conflict with the protection of some Natura 2000 sites.
- Regional Planning Guidelines for Greater Dublin Area 2010-2022¹⁴
 - Section 4.6 of the Habitats Directive Assessment of the Regional Planning Guidelines set out the mitigation measures that have been passed down into the current AA of the Draft Local Area Plan. These include, but are not limited to:
 - GIP2; SIR6: Ensure that plans and projects relating to recreational, leisure or tourism activity which have the potential to negatively impact on Natura 2000 sites undergo a HDA in the early stages of planning. Where mitigation is feasible, measures should be prescribed to actively manage visitor access and ensure that sensitive areas are protected. Where such measures are not feasible or uncertain, mitigation is through avoidance.
 - GIP2; GIP3; GIP4; PIR18; GIR21; GIR22, GIR23: Ensure protection of coastal waters and coastal sites, which have been identified as particularly vulnerable to increased pressure, through integrated coastal zone management and early consideration of Article 6 requirements for all plans and projects potentially impacting on Natura 2000 site.
 - GIP2; FRI; FR4: Ensure protection of Natura 2000 sites supporting rivers or streams by avoiding development on floodplains and ensure that flood risk assessment policies, plans or projects are compliant with Article 6 of the Habitats Directive and avoid or mitigate negative impacts on Natura 2000 sites.
- Draft Transport Strategy for Greater Dublin Area 2011-2030¹⁵
 - The Natura Impact Statement identified the potential for significant impacts on the River Boyne and Blackwater cSAC (SPA not designated at that time). It stated:

¹⁴ <http://www.rpg.ie/>

¹⁵ <http://www.nationaltransport.ie/publications/transport-planning/>

"It is considered possible that general pressures on water quality in the Boyne and Blackwater catchments resulting from, agriculture, forestry, housing, industry, etc, in combination with any deterioration in water quality resulting from construction activity during construction of either the new Navan Rail Line or the Leinster Orbital Route, could potentially result in significant negative impacts on the cSAC and this needs to be taken account of in any Appropriate Assessment at project level". It identified that the most effective mitigation for both of these transport impacts would be at the project level.

- Meath Local Authorities Climate Change Strategy and Energy Management Action Plan 2011-2012¹⁶
 - The Plan has not undergone an AA but many of the proposed measures would combine with the measures proposed in the current Draft Local Area Plan to reduce the likelihood of any significant effects on the European sites. Many of the policies aiming for better water usage, increased energy efficiency, waste, housing and planning are directly compatible with the Draft Local Area Plan. Only policies that promote cycling at the coast could put increased pressure on the coastline in the form of potential disturbance. However the mitigation measures in the current Draft Plan would offset the potential for such an impact to occur.

3.10 Responsibilities for implementing mitigation policies

The responsibility for implementing the Local Area Plan lies solely with the Planning Authority through the Planning consent process. Applicants who intend to develop within the County are obliged to ensure that their application is consistent with the Policies and Objectives within the Plan.

Applicants must provide information to allow the Planning Authority to screen the application and decide if Stage 2 Appropriate Assessment is required. Information provided in this NIR will assist applicants and the Council in this part of the AA process.

3.11 Conclusion of Stage 2 : Appropriate Assessment

This Natura Impact Report records the decisions that were taken during the preparation of the Bettystown-Laytown-Mornington East and Donacarney-Mornington Local Area Plan 2014-2020. It determines that, assuming the successful implementation of the Policies and Objectives, there will be no likely significant effects on the European sites in the zone of influence of the Plan in isolation or in combination with other Plans and Projects acting in the same area.

¹⁶

<http://www.meath.ie/CountyCouncil/Environment/ClimateChange/LargeFileDownload,44533,en.pdf>

APPENDIX A

Table A1 Qualifying Interests and Threats to Key Conditions for Natura 2000 sites¹⁷

Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
CANDIDATE SPECIAL AREAS OF CONSERVATION				
Boyne Coast and Estuary	IE0001957	Atlantic salt meadows (Glauco-Puccinellietalia maritima)	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 or coastal protection works,
		Mediterranean salt meadows (Juncetalia maritimi)	Frequency of tidal submergence	Grazing, Infilling & Reclamation, Invasive Species, Erosion

¹⁷ Information collected through a combination of reference to Natura 2000 Data forms, Supporting Documents for Conservation Objectives and consultation with the NPWS.

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Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
River Boyne and Blackwater	IE0002299	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
	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 gravels. Quality riparian vegetation. Unhindered migratory routes.	Cultivation (Pesticides, Fertilisation, Grazing), Pollution (Water Pollution), Grazing, Trampling/Overuse, Erosion, Afforestation, 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.	Water Pollution, Mortalities/Illegal Killings, Recreation/Disturbances, Hydroelectric Schemes, Aquaculture/fisheries, chemical spillages, American

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Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
			Unhindered passage along waterways.	Mink
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, Erosion
Dundalk Bay	IE0000455	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)	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 (<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
		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.

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Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
SPECIAL PROTECTION AREAS				
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. Undisturbed coastal roosting sites close to feeding areas.	
		Golden Plover (<i>Pluvialis apricaria</i>)		
		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 availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation	

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Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
		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>)		
		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.
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 Goose (<i>Branta bernicla hrota</i>)	Food availability (intertidal aquatic vegetation/pasture/ crops).	

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Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
			Undisturbed coastal roosting sites close to feeding sites. Grazing.	
		Purple Sandpiper (<i>Calidris maritima</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.	
		Turnstone (<i>Arenaria interpres</i>)		
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 fauna/pasture/cereal). Undisturbed roosting sites close to feeding sites.	

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Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
		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>)		
		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</i>)		

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Site name	Site Number	Qualifying Interests	Key environmental conditions supporting site integrity	Potential Threats to Key Conditions
		<i>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	-	
		Curlew (<i>Numenius arquata</i>)		
		Redshank (<i>Tringa totanus</i>)		
Rockabill	[004014]	Roseate Tern (<i>Sterna dougallii</i>)	Sea level. Natural/artificial nest site availability.	Invasive predatory species (Rats, birds, foxes). Offshore pollution (chemical spillages).
		Common Tern (<i>Sterna hirundo</i>)	Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation	
		Arctic Tern (<i>Sterna paradisaea</i>)		

Appendix B

Policy Guidance Note for the Protection of Natura 2000 sites

Rev 1.0

16th October 2013

How to use this Policy Guidance Note

This Note has been prepared at the commencement of the preparation of the new Local Area Plan to help those preparing the new Plan in avoiding adverse impacts on Natura 2000 sites. It is an advisory note only and not exhaustive in its scope. It will be revised as the Plan is progressed further and more data is analysed.

Section 1 describes the Natura 2000 sites that have the potential to be adversely affected by the CPD. It lists the types of impacts that could affect each site. These are the impacts that should be avoided.

Section 2 lists the advice for planners on how to avoid impacts on these sites. It is divided into sections that are considered likely to make up the draft LAP for ease of reference. Note that this Guidance note only relates to protection of Natura 2000 sites and their qualifying interests and not ecological features outside of them.

Section 3 provides policy guidance on how to maintain or safeguard specific conditions underpinning site integrity for each Qualifying Feature type found in Meath and its environs.

Section 1: Potential Impacts and current threats

As part of the Screening stage in the Appropriate Assessment process, Variation One and County Development Plan, consultation with Meath County Council and existing background documentation on the LAP area were interpreted as being the background for the Draft LAP. Potential sources of impacts were identified and linkages between these impacts and the integrity of the Natura 2000m sites within Meath and its environs were subsequently highlighted. In the absence of details of the LAP and its policies and objectives, it is considered likely that there is potential for likely significant effects on the integrity of the European Sites, in particular:

- Boyne Coast and Estuary cSAC
- River Boyne and Blackwater cSAC
- River Boyne and Blackwater SPA
- Boyne Estuary SPA
- River Nanny Estuary and Shore

This policy note is drawn up on this basis.

Appropriate Assessment of Local Area Plan
Bettystown-Laytown-Mornington East Donacarney-Mornington 2014-2020

Site	Possible Impacts arising from the Plan	Specific Issues raised by NPWS (informal consultation in 2012 as part of the Meath County Development Plan)
Boyne Coast and Estuary cSAC	Coastal developments can threaten local water quality especially during construction and operation. Coastal works can affect embryonic dunes which are sensitive to changes in coastal geomorphology. Any changes in the Boyne catchment leading to changes in water quality could affect condition of the habitats. Waste Water Treatment Plants that are operating over capacity or require upgrading have potential to impact upon water quality.	Bettystown: lack of car parking and toilets putting pressure on dunes and the beach. Potential threat of surface water run-off from newly developed and construction areas. Some issues regarding unauthorised local dumping of house and garden waste in estuary near to houses.
River Boyne and Blackwater cSAC	Water abstraction for potable water supply within catchment of alkaline fens. Direct and indirect impacts on alluvial forests, disturbance of otter holts and bridges, aquaculture and other developments have potential to affect Salmon migration and spawning success. Waste Water Treatment Plants that are operating over capacity or require upgrading have potential to impact upon water quality.	Alkaline fen at Lough Shesk and surrounding Loughs in a relatively undeveloped area and not thought to be at risk. Riverside walks pose threat to alluvial woodland, otters and possibly Salmon and Lamprey if close to bank. Issues re Wastewater treatment plants discharging to the Boyne systems. Issues re permitted (but not implemented) abstraction from the Boyne at Navan that had no appropriate assessment. Also abstraction at Ballinger and Liscarton from R. Blackwater. Invasive species problems include Giant Hogweed, Japanese Knotweed, Cherry Laurel and Rhododendron.
Boyne Estuary SPA	Impacts due to increased levels of recreational activities from nearby growth towns. Developments in Boyne catchment leading to cumulative changes in water quality.	Problem of recreational disturbance of Little Tern colony at Baltray (Louth) and their feeding grounds in the estuary due to jet-ski activity.
River Nanny Estuary and Shore SPA	Impacts due to increased levels of recreational activities from nearby growth towns. Developments in River Nanny catchment leading to cumulative changes in water quality. Impacts of proposed port development at Bremore (potential direct/indirect habitat loss, offshore impacts, coastal disturbance).	Apart from Laytown, little development pressure. Some fields used by birds that are outside of the SPA and could be developed. Future redevelopment of Military camp site may need to be considered. Generally not a high amenity area but some impacts of dog-walking disturbance on wintering birds.
River Boyne and Blackwater SPA	Kingfisher nesting sites may be affected by increased levels of recreational activities, construction of riverside boardwalks, removal of riparian woodland and alteration of watercourses and flooding regime. Cumulative impacts of developments and projects have potential to impact upon water quality within the river systems.	Canoeing at Slane bridge and upstream unlikely to be a source of disturbance to Kingfisher unless new development associated with recreation occurred near to nesting sites. Need to address streams entering main channel and the potential for areas outside the SPA (e.g. Canal) to be supporting features to the SPA. Riverside walks pose threat to nesting sites if not correctly located or designed.

Section 2: Recommendations for each Section in the Development Plan

This section provides some preliminary recommendations to be included as text, policies or objectives in the emerging LAP.

2.1 Policy Context

- 2.1.1 Include reference to the role of the Council as competent authority for carrying out appropriate assessments under the EC Habitats and Birds Directives. This role applies to the preparation of Local Area Plans but also to all other plans and projects that may have likely significant effects on the integrity of Natura 2000 sites.
- 2.1.2 State the LAP's will be consistent with the recommendation contained as mitigation measures in the Habitats Directive Assessment of the Regional Planning Guidelines, Meath Development Plan 2013-2019 and Strategic Environmental Assessment.
- 2.1.3 Highlight the legal requirement that all plans and projects that are proposed as a result of the LAP should be screened according to Article 6 of the Habitats and an appropriate assessment carried out where necessary. Highlight that policies and objectives in this LAP may help in determining if a full (Stage 2) Appropriate Assessment is required. There is no need to re-state this requirement throughout the rest of the LAP as this is now enshrined in law.

2.2 Settlement Strategy

- 2.2.1 Settlement patterns should be proposed that take account of the indirect effects of local population increases on Natura 2000 sites. This is particularly important with regard to physical disturbance of riparian (riverbanks) habitat and sensitive coastal habitats such as sand dunes. Birds such as Kingfisher and wildfowl (*e.g.* overwintering geese) are vulnerable to pedestrian, cyclists and motorised craft disturbance. Policies that have any locational component should take account of known Kingfisher territories and breeding sites and should recommend that in any of these areas that breeding surveys should be carried out and any relevant proposed developments should be correctly designed to avoid these areas. If areas cannot be avoided, as the spatial extent of the constraints may be too large, then mitigation measures should be proposed such as buffer zones from the river, design of footpath, locations and design of amenities *etc.*
- 2.2.2 Ensure that settlement patterns include the concurrent provision of appropriate services such as recreation, water supply and treatment facilities. The location of such facilities, the resources they use and their ecological impacts can have adverse effects on the integrity of Natura 2000 sites if inadequately designed or located. The location of any lands zoned for development within 200m of the Boyne or Nanny cSAC, or lands within its floodplain or within 5km upstream, should be scrutinised for their potential for interaction with the Boyne ecosystem. Whilst zoning lands within this buffer is not precluded, any planning application within these high-risk areas is likely to require a full appropriate assessment (Stage 2 AA). This assessment would have to prove that the development can be constructed and operated:
 - Without resulting in runoff of contaminated surface water to the Boyne or any of its tributaries;

- Without loss of any alluvial woodland (requiring a specialist survey to map this habitat type within the zone of influence of the proposed development);
- Without causing loss of or disturbance to Kingfisher and their breeding and feeding places;
- Without causing loss of wintering bird feeding and resting habitat;
- Without affecting the passage of salmon, lamprey and otters or disturbing their feeding, resting, breeding and nursery areas.

In some cases this may require avoidance of areas for zoning.

- 2.2.3 Ensure that settlement that may result in direct or indirect increase in sewage takes place only in areas served by Wastewater Treatment Plants with the capacity to accommodate extra loadings. Development that would add extra loading to a WWTP that is at or over-capacity and drains into a catchment containing a Natura 2000 site that is dependent on good water quality cannot be promoted. Policies which may wish to do so must be strongly caveated that the WWTP must be upgraded to allow treated effluent meet the water quality standard required by the catchment and the Natura 2000 site, before any additional development takes place. Several local authorities now refuse planning applications on the basis that there is no capacity for sewage treatment. Policies that rely upon good intentions to commit to upgrading plants within the lifetime of the Plan cannot used as mitigation measures, as experience has shown that economic changes can override these intentions. These types of caveats in Plans are no longer acceptable unless there is funding and contractual arrangements in place.
- 2.2.4 Precautions must be made for water abstraction if it occurs within the catchment of any of the Natura 2000 sites that rely on water quality and volume. It cannot be assumed that water abstraction is sustainable without the relevant appropriate assessment being carried out.
- 2.2.5 Similarly precautions must also be made for flood and surface water run-off to ensure they are adequately treated to remove pollution in the form of silt, hydrocarbons and any other pollutants that may decrease water quality in the receiving body.
- 2.2.6 Specific linkages between settlements and Natura 2000 sites are shown below:

Settlement	Natura 2000 site
Laytown	River Nanny Estuary and Shore SPA
Bettystown	River Nanny Estuary and Shore SPA, Boyne Estuary SPA and Boyne Coast and Estuary cSAC
Mornington East	River Nanny Estuary and Shore SPA, Boyne Estuary SPA and Boyne Coast and Estuary cSAC
Donacarney	near Shore SPA, Boyne Estuary SPA and Boyne Coast and Estuary cSAC, River Boyne and Blackwater cSAC
Mornington	near Shore SPA, Boyne Estuary SPA and Boyne Coast and Estuary cSAC, River Boyne and Blackwater cSAC

2.3 Economic development

- 2.3.1 Generally the assessment of impacts of economic development will take place in response to individual policy proposals. As a general rule, specific proposals for economic development in urban centres will have to have regard to the sensitivities of the Natura 2000 sites as indicated in the Screening report. Specific regard should be paid to how the development will be sustained by water supply and wastewater treatment facilities.

2.4 Infrastructure

- 2.4.1 Infrastructure proposals that have a spatial reference plan should take into the account the sensitivities of the Natura 2000 sites.

- 2.4.2 A policy of preferring to avoid locating any potentially-damaging infrastructure within/through within Natura 2000 sites is recommended. This may not be possible (e.g. the Boyne) and where this is the case then appropriate mitigation may be required.

- 2.4.3 Specific policy advice is given to the following infrastructure types:

- a) Public Transport (Bus & Rail), Walking & Cycling.
 - will need to ensure consistency with NTA 2030 Vision AA.
 - Ensure that new cycle routes along the Boyne and coastline address the potential to cause habitat loss and visual disturbance of qualifying interest habitats and species and therefore are likely to require a Stage 2 AA.
 - Promote policies that allow pedestrian access to certain areas of Natura 2000 sites for sustainable appreciation of their value.
- b) Roads Infrastructure
 - Promote the preferential avoidance of Natura 2000 sites in new road schemes and highlight the need to address construction impacts when within 2km of a Natura 2000 site.
 - Promote the need to address the fragmentation of green infrastructure/ecological corridors that connect Natura 2000 sites.
 - Highlight the importance of considering the localised increase in Nitrogen oxides and subsequent acidification/eutrophication effects on wetland and bogs sites downwind. Adopt the National Roads Authority guideline of looking at potential effects on Natura 2000 sites when located within 1km of the new road.
- c) Water Supply
 - Promote the preferential avoidance of abstraction from Natura 2000 sites unless it can be proven that there are no risks to the integrity of the site (by carrying out an appropriate assessment) highlight the potential of long-range effects of abstraction from both surface and groundwater including sites outside of the County. Highlight the specific effects on fens and bogs.
- d) Wastewater treatment
 - Include a policy that states that wastewater treatment plants discharging into the Boyne catchment or to coastal Natura 2000 sites are, where

required suitably maintained and upgraded in advance of any additional loadings beyond their capacity in order to protect water quality.

e) Flooding

- Avoid a policy of flood relief along the Boyne that may impact on the flood regime required by alluvial woodland – a qualifying interest.
- Avoid a policy of diverting or closed-culverting watercourses or drainage ditches as flood relief measures in and around Natura 2000 sites and promote use of open ditches.
- Promote positive flood relief measures that can enhance habitats in the Boyne floodplain such as swales, constructed wetland basins *etc.*

f) Waste management

- Promote local waste disposal facilities close to housing areas including recycling banks to minimise the tendency to fly-tip.

g) Energy

- Ensure that any proposal for fracking or similar subsurface exploration is accompanied by an appropriate assessment that addresses the potential impacts on groundwater quality.
- Ensure that proposals for biocrops within the Boyne catchment and the coastal strip consider the potential for spreads or hybridisation of native flora.
- Ensure that any proposal for geothermal or similar subsurface exploration is accompanied by an appropriate assessment that addresses the potential impacts on groundwater quality.
- Ensure that any proposal for hydro-energy in the Boyne catchment is accompanied by an appropriate assessment that addresses the potential impacts on passage of salmon and lamprey and the impacts on otters.
- Ensure that any proposal for tidal or wave-energy projects is accompanied by an appropriate assessment that addresses the potential impacts on wintering birds, coastal habitats and their supporting ecosystems.
- Promote a policy of preferential avoidance of siting wind energy projects in Natura 2000 sites, or sites that are on the flight lines of wintering birds unless it can be proven that there are no risks to the integrity of the sites (by carrying out an appropriate assessment supported by appropriate studies).
- Promote a policy of preferential avoidance of overhead lines in Natura 2000 sites, or sites that are on the flight lines of wintering birds unless it can be proven that there are no risks to the integrity of the sites (by carrying out an appropriate assessment supported by appropriate studies).

2.5 Housing

- 2.5.1** All development should take place with cognisance to population/demographics. As a general rule, specific individual policy proposals are dependent on current and future demographics for all types of development in urban centres will have to have regard to the sensitivities of the Natura 2000 sites. Population and access to sensitive areas must be appropriately managed. In addition regard should be paid to how developments will be sustained by water supply, wastewater treatment facilities and accommodate surface water run-off.

- 2.5.2 Generally the assessment of impacts housing will take place in response to individual policy proposals. As a general rule, location-specific proposals for housing will have to have regard to the sensitivities of the Natura 2000 sites. Specific regard should be paid to how the development will be sustained by water supply and wastewater treatment facilities.
- 2.5.3 Promote careful consideration of the interface between housing areas and rural surroundings with respect to the potential for littering, light spill, trampling of sensitive habitats and disturbance of sensitive species.

2.6 Rural Development

- 2.6.1 Promote good practice with regard to the siting and design of septic tanks, the maintenance of existing tanks using a Register as deemed necessary. A high level of scrutiny should be placed on applications within 2km of watercourses in the Boyne catchment.
- 2.6.2 Place a high level of scrutiny on policies proposing groundwater abstraction within 2km of alkaline fen habitats in the Boyne cSAC. Applicants should be able to demonstrate that there will be no drawdown of the water table in the cSAC as a result of abstraction.
- 2.6.3 Policies should promote rural tourism that allows sustainable appreciation of the biodiversity value of the Natura 2000 sites. Careful control of tourism to ensure that the qualifying interests are not compromised or exploited to a level that threatens their integrity.
- 2.6.4 Promote a policy of avoidance of deforestation or commercial afforestation within the Natura 200 sites unless directly relating to the management of the site for its qualifying interests.
- 2.6.5 Recognise that the Meath coastline is subject to natural geomorphological change and that longshore drift and areas of selective erosion and deposition are natural processes and should not be interfered with unless there are overriding reasons (which may be subject to appropriate assessment). Coastal development should take account of climate change and the interaction between the Natura 2000 qualifying interest habitats and species that may respond to rising seas levels and climatic changes.
- 2.6.6 Policies promoting sensitive landscaping in all developments should be promoted. In order to reduce the risk of spread of non-native flora into Natura 2000 sites and also other areas of nature conservation value, all landscaping proposals should have an emphasis on use of native species. MCC should include a list of invasive species that should not be proposed as part of landscaping schemes (refer to the *European Communities (Birds and Natural Habitats) Regulations 2011*).

2.7 Social Strategy

- 2.7.1 Policies promoting leisure and recreation should promote use of local open space and avoid forcing populations to the coastal sensitive areas.

- 2.7.2 For coastal population centres, policies should promote development of off-leash parks and bye-laws controlling dog walking in certain areas of the beaches and strands. Whilst usually unpopular and hard to enforce, it can raise the awareness of the sensitivity of the beaches to disturbance.
- 2.7.3 For policies that promote watersports and use of jet skis, consideration must be made to allocating preferential areas of water for recreation and buoying these in certain seasons to prevent disturbance to birds.
- 2.7.4 Policies that promote that promote use of riverside walks along the Boyne cSAC and SPA, should ensure that any proposals are fully screened for their potential impacts on alluvial woodland, Kingfisher nesting and feeding sites and impacts on otter, salmon and lamprey. Any proposal must be designed to avoid sensitive areas.

2.8 Cultural heritage and Landscape

- 2.8.1 Policies should be included to promote, provide information on and educate the local population on the need to protect Natura 2000 sites. These should also support the need for a network of green infrastructure, including surrounding pNHAs that may help to support the qualifying interest species.
- 2.8.2 Cognisance should be given to the fact that many protected species are located outside Natura 2000 sites.
- 2.8.3 Policies should also note that areas of the LAP lands are within a sensitive landscape. Design should be complementary with elements of the landscape used by protected species respected and maintained where possible e.g. open grasslands for wintering geese.
- 2.8.4 Policies promoting sensitive landscaping in all developments should be promoted. In order to reduce the risk of spread of non-native flora into Natura 2000 sites and also other areas of nature conservation value, all landscaping proposals should have an emphasis on use of native species. The LAP's should include a list of invasive species that should not be proposed as part of landscaping schemes (refer to the *European Communities (Birds and Natural Habitats) Regulations 2011*).
- 2.8.5 Policies to promote the re-use of raised bog habitat that has ceased being cut, as a community amenity should be encouraged. Suitable re-uses include nature trails and outdoor classrooms. Such proposals will have to undergo screening for appropriate assessment.

Section 3 Policies that will help to maintain Specific Conditions underpinning Site Integrity for each Qualifying Feature type.

The table below lists the qualifying interests found in the Natura 2000 sites in East Meath and its environs. The second column suggests the policies that will help protect these features.

Qualifying feature	Policies to maintain site condition
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>)	<ul style="list-style-type: none"> Protect against loss due to riverside development, erosion caused by changes in flood regime and localised drying out by flood relief measures or floodplain changes.
Mudflats and sandflats not covered by seawater at low tide	<ul style="list-style-type: none"> Promote protection of watercourses from contamination, nutrient run-off and care when promoting activities that could increase nutrients into the ground and surface water. Protect rivers and riparian corridors from habitat loss and pollution. Ensure that proposed development within 50m of any watercourse takes into account the potential for impacts on these habitats. Ensure protection and reduce access to these habitats, in particular salt marsh and dune habitat, through appropriate management of local population. Protect against trampling by recreational activities. Promote use of formal footpaths through dunes in heavily used areas. Promote restoration of degraded dunes by use of innovative techniques. Integrated Coastal zone management approach required to protect coastal habitats from a wide range of anthropogenic pressures. Protect against localised pollution incidents.
Estuaries	
Spartina swards	
Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>)	
Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	
Salicornia and other annuals colonizing mud and sand	
Embryonic shifting dunes	
Fixed coastal dunes with herbaceous vegetation (grey dunes)	
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	
Otter <i>Lutra lutra</i>	
River Lamprey <i>Lampetra fluviatilis</i>	<ul style="list-style-type: none"> Protect rivers and riparian corridors from habitat loss and pollution. Ensure that proposed development within 50m of any watercourse in the Boyne catchment takes into account the potential for impacts on these species. Ensure that any bridges or other crossings allow free passage for these species along the river corridor.
Atlantic Salmon <i>Salmo salar</i>	
Golden Plover (<i>Pluvialis apricaria</i>)	<ul style="list-style-type: none"> Protect coastal roosting sites close to feeding sites. Coastal zone management to protect against changes to flooding regime of coastal grasslands. Protect against localised pollution incidents.
Bar-tailed Godwit (<i>Limosa lapponica</i>)	
Grey Plover (<i>Pluvialis squatarola</i>)	
Knot (<i>Calidris canutus</i>)	
Lapwing (<i>Vanellus vanellus</i>)	
Oystercatcher (<i>Haematopus ostralegus</i>)	

Qualifying feature	Policies to maintain site condition
Redshank (<i>Tringa totanus</i>)	<ul style="list-style-type: none"> • Protect against repeated disturbance due to pedestrians and dogs. • Protect coastal roosting sites close to feeding sites.
Ringed Plover (<i>Charadrius hiaticula</i>)	
Sanderling (<i>Calidris alba</i>)	
Herring Gull (<i>Larus argentatus</i>)	
Little Tern (<i>Sterna albifrons</i>)	
Kingfisher (<i>Alcedo atthis</i>)	
Shelduck (<i>Tadorna tadorna</i>)	
Turnstone (<i>Arenaria interpres</i>)	
Wetlands and Waterbirds	