

Meath County Development Plan 2013-2019

Screening Report for Appropriate Assessment of Draft Variation No 3.

21st December 2015

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1 INTRODUCTION

1.1 Background

Meath County Council adopted the Meath County Development Plan 2013 – 2019 on 17th December 2012 and it took effect from the 22nd January 2013. The purpose of the Plan is to promote sustainable development by encouraging economic development, protecting the environment and enhancing the social fabric of the area. Since the adoption of the County Development Plan, 2 no. Variations have been proposed and adopted.

Under Part XAB of the Planning and Development (Amendment) Act 2010, proposed variations to development plans must undergo a formal “test” or “screening” to see if they would have likely significant effects on specific sites designated for their nature conservation importance. These sites are those designated under the European Commission’s Natura 2000 network of sites (hereafter “European sites”¹). These sites are designated on the basis of the presence of certain habitats and species that are deemed to be of international importance.

The EC Habitats and Birds Directives are the framework for the designation of these sites. The EC Habitats Directive requires the “screening” of plans and projects under Article 6(3). If the screening process 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 laid down in law, there are guidance documents that are used to provide and indication of how this assessment may be carried out.

In order to ensure that Draft Variation No. 3 to the Meath County Development Plan 2013-2019 complies fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation (Planning and Development (Amendment) Act 2010), Meath County Council appointed Brady Shipman Martin and Scott Cawley Ltd to carry out the screening of the proposed Plan to see if it requires an AA.

In accordance with the Departmental guidance, AA screening can be an iterative process and be repeated during the preparation of the Variation. This version of the AA Screening Report is that which will be published alongside the Draft Variation for a period of public consultation.

A copy of the proposed draft Variation (No. 3) of the Meath County Development Plan 2013- 2019, together with the Strategic Environmental Assessment Screening Report, The Appropriate Assessment Screening Report and Strategic Flood Risk Assessment and Management Plan pursuant to Article 6 of the Habitats Directive 92/43/EEC will be available for inspection from 21st December 2015 at Meath

¹ Natura 2000 sites are defined under the Habitats Directive (Article 3) as a European ecological network of special areas of conservation composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II. The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland these sites are designed as *European sites* - defined under the Planning Acts and/or Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

County Council Planning Department, Buvinda House, Dublin Road, Navan, County Meath, C15 Y 291 during normal office hours. The proposed draft Variation (No. 3) of the Meath County Development Plan 2013-2019 is also available for inspection on Meath County Council's website at www.meath.ie/planning.

1.2 Aim of this Report

The aims of this report are to:

- to identify the Natura 2000 network within the "zone of influence" of the proposed variation;
- to identify the linkages between the sensitivities of the individual Natura 2000 sites and the implications of the proposed variation;
- To determine if the implementation of the draft variation could result in likely significant effects on the European sites in isolation and in combination with policies in the Meath County Development Plan 2013-2019 and other plans and projects.

In addition, this report will be used for the purposes of undertaking consultation with the National Parks and Wildlife Services (NPWS) as well as Inland Fisheries Ireland (IFI) and the Environmental Protection Agency (EPA) to inform the Appropriate Assessment process.

2 OVERVIEW OF THE PROPOSED VARIATION

In accordance with best practice in the Appropriate Assessment of plans, the screening stage is carried out prior to the final drafting of the objectives and policies. This is to allow the objectives and policies to be devised to take into account the relevant environmental safeguards that may be required to avoid posing an adverse impact on the European sites. This section of the AA Screening Report summarises the intention of the Draft Variation and its structure.

The key purpose of Variation No. 3 of the County Development Plan is to align the County Development Plan with the key tenets of the Economic Development Strategy for County Meath 2014 – 2022 as they relate to statutory land use planning. The variation also updates the Development Plan in order to incorporate amendments to Volume 1 which arose from the adoption of Variation No. 2. The variation also identifies potential future changes to the settlement hierarchy of the County.

The Economic Development Strategy sets out the medium-term strategy for economic development within County Meath until 2022 and has been prepared in light of the recommendations set out within "Putting People First (2012) and the Local Government Reform Act of 2014. The Economic Development Strategy is also mindful of the wider regional context of economic and employment development in Meath and neighbouring local authority areas.

The Economic Development Strategy for County Meath sets evidence based measures aimed at accelerating the economic transformation, revitalisation and sustainable development of County Meath from 2014-2022.

Key elements of the Economic Strategy include:

- Projections of the level of employment in County Meath to 2022 (going into the Economic Vision for Meath), using the 2011 situation as the benchmark, and carrying out sectoral projections of what can be achieved based on the inherent strengths of the local economy and specific sectoral opportunities (2011 is the latest available year for which full factual information is available on employment within and outside of County Meath);
- Assessment of spatial planning opportunities in the form of identified sites around the County and the fit of these locations in the context of the current Meath CDP 2013-2019 (as varied);
- Marketing Plan for Meath, which integrates the economic and spatial plans;
- Overall set of strategic recommendations for implementing the Economic Development Strategy and monitoring progress during the period 2014-2022.

The Screening process has therefore focussed on the potential for any likely significant effects to arise at the scale of the text within the CDP that has been revised.

The majority of the Draft Variation lacks enough geographic specificity and certainty as to how the physical and biological environment may be affected as a result of its implementation. However in several places there are references to specific locations (e.g. North Dunboyne, Stamullen etc) which permits more accurate judgements as to how these locations may be affected. In such cases the AA Screening process then moved onto searching for any source-pathway-receptor relationships to determine if there were any likely significant effects on European sites.

Variation No. 3 of the Meath County Development Plan comprises a number of elements as outlined under the following headings:

- Part 1: Incorporation of the recommendations of the Economic Development Strategy for County Meath 2014-2022
 - Policy wording changes to include reference to the Economic Development Strategy
 - Zoning of additional lands for Employment Generating Uses
 - Removal of Phasing Objective pertaining to Employment Zoned lands and removal of employment lands due to flood mapping
 - Lands at North Dunboyne
 - Review of the Zoning Objectives set out within the County Development Plan
 - Framework Plan Requirements
 - Review of Development Management Objectives
- Part 2: Revisions to Volume 1 of the County Development Plan in order to incorporate Variation no. 2 of the County Development Plan 2013-2019
- Part 3: Potential Future Revisions to the Settlement Strategy of the County Development Plan

3 METHODOLOGY

3.1 Formal Guidance

The Screening stage has taken 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, updated April 2015); 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)

3.2 Sources of Information Used

Sources of information relied upon are listed below:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie;
- Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie;
- Information on land-use zoning from the online mapping of the Department of the Environment, Community and Local Government <http://www.myplan.ie/en/index.html>;
- Information on water quality and water body mapping in the area available from www.epa.ie;
- Information on the Shannon International River Basin District from www.wfdireland.ie;
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie;
- Information on the status of EU protected habitats and species in Ireland (National Parks & Wildlife Service, 2013a and 2013b);
- Information on Special Conservation Interests for SPAs in Ireland from Irelands Article 12 submission to the EU Commission on the Status and trends of birds species 2008-2012;
- Information on the conservation status of birds in Ireland (Colhoun & Cummins, 2014);
- Various GIS data sets held internally by Meath County Council
- Knowledge of the sites from previous field work carried out in the area;
- Meath County Development Plan 2013-2019 (as varied).

3.3 Timing of Screening

There is no legal requirement as to when the screening of any plan, or variation thereof, for likely significant effects should take place. Good practice agreed amongst AA professionals is that it should be a relatively brief stage at the beginning of the review process. Its aim is to decide if the proposed variation needs to be taken forward to a more detailed level of assessment (as required under Section 177V of the Planning and Development (Amendment) Act 2010) and which European sites may be potentially affected. Screening under Section 177U is not the same as a full AA under Section 177V – 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.

3.4 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 and then collecting as much information as possible on the “Qualifying Interests” and how site integrity may be defined for each European site by reference to the site’s “Conservation Objectives”. 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 European sites lie within a 15km buffer zone? (sometimes referred to as pre screening)
2. What are the Qualifying Interests for each European 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 draft variation No 3 that could give rise to these threats?

If, based upon the currently available information, there are aspects of the Draft Variation that could affect the European sites then they will require further analysis in the form of an Appropriate Assessment under Section 177V.

The screening process will be revisited after the receipt of observations from the public and other consultees after the conclusion of the public display period.

4 RELEVANT EUROPEAN SITES

4.1 Identification of relevant European sites

In accordance with the Department of Environment, Heritage and Local Government guidance (DoEHLG, 2010), an initial distance of 15km from the settlements that were the subject of the variation was selected for the initial consideration of European sites. Due to the fact that the settlements covered the whole County it was decided to use the County boundary as the start of the 15km buffer on this initial sweep of the European sites.

This distance was deemed to be sufficient to cover all likely significant effects which may arise from the implementation of the variation on Natura 2000 sites. Spatial boundary data on the Natura 2000 network were extracted from the NPWS website on 4th December 2015.

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.

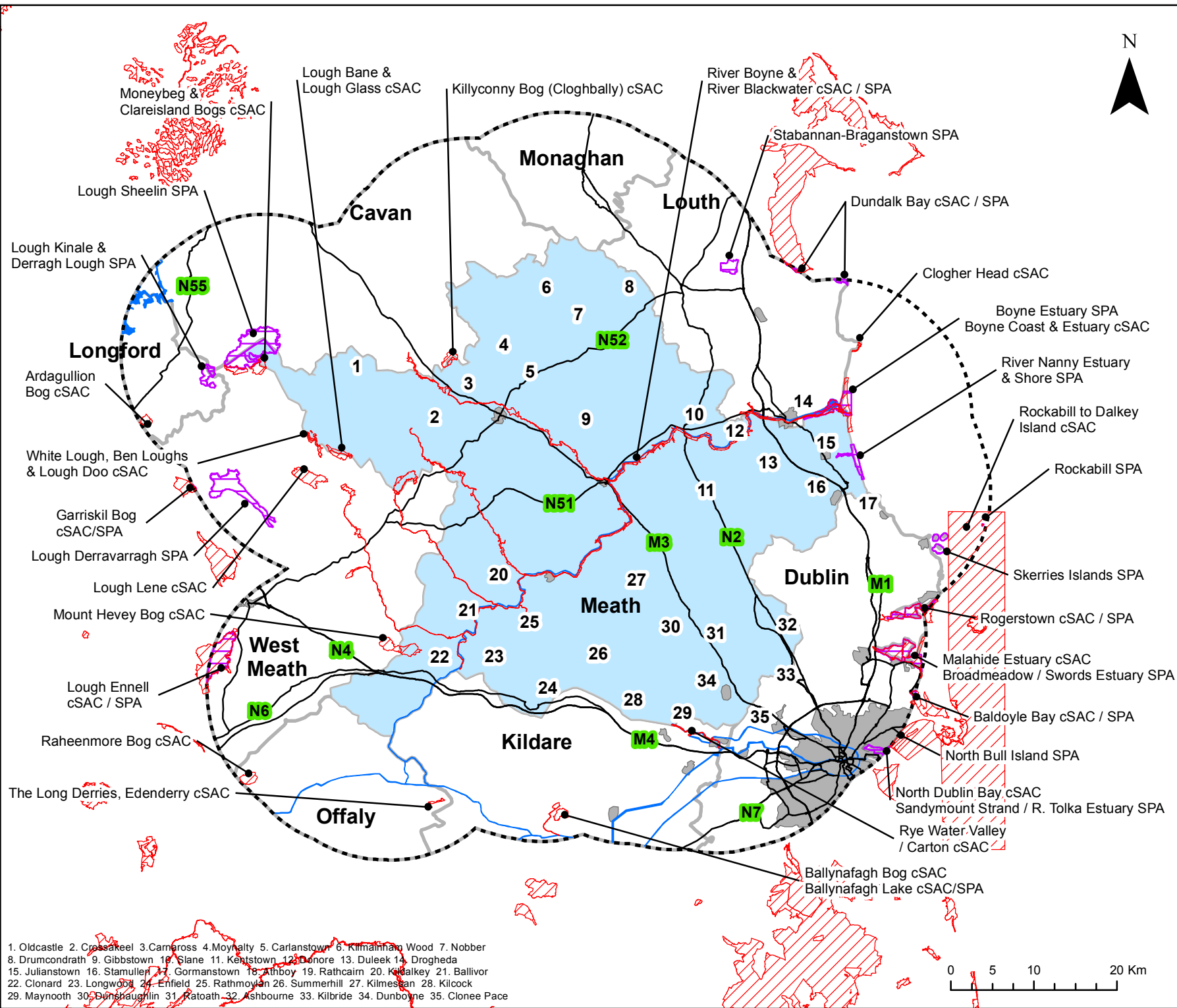
All European sites which fall within 15km of the County boundary are listed in Table 1 below. Table 2 lists the non-Natura 2000 sites.

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

Sites within County Meath	
Candidate Special Areas of Conservation	Special Protection Areas
Boyne Coast and Estuary	Boyne Estuary
River Boyne and Blackwater	River Nanny Estuary and Shore
Rye Water Valley / Carton	Lough Sheelin
Mount Hevey Bog	River Boyne and Blackwater
White Lough, Ben Loughs and Lough Doo	
Lough Bane and Lough Glass	
Killyconny Bog (Cloughbally)	
Monybeg and Clareisland Bogs	
Within 15km Buffer Zone	
Candidate Special Areas of Conservation	Special Protection Areas
Ardagullion Bog	Stabannan Braganstown
Garriskil Bog	North Bull Island
Lough Lene	(South Dublin Bay) Sandymount Strand / River Tolka Estuary
Lough Ennell	Baldoyle Bay
Raheenmore Bog	Rogerstown Estuary
The Long Derries, Edenderry	Skerries Islands
Ballynafagh Bog	(Malahide Estuary)Broadmeadow / Swords Estuary
Ballynafagh Lake	Dundalk Bay
North Dublin Bay	Lough Kinale and Derragh Lough

Baldoyle Bay	Garriskill Bog
Malahide Estuary	Lough Derraghvarragh
Rogerstown Estuary	Lough Ennell
Clogher Head	Rockabill
Dundalk Bay	
Rockabill to Dalkey Island	

All of these sites are presented on Figure 1.



- Legend**
- SAC
 - Roads
 - 15km Buffer Zones
 - SPAs
 - Major Rivers
 - Urban
 - Bordering Counties

Legend Note
Rivers with a corresponding conservation designation are coloured accordingly

Title	Figure 1: Natura 2000 Network Co. Meath
Project	AA Stage 1
Project No.	150165
Client	Meath Co. Co.
Revision	1
Date	November 2015

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

Sites within County Meath	
Proposed Natural Heritage Areas	Natural Heritage Areas
Ballyhoe Lough	Girley Bog
Ballynabarny Fen	Jamestown Bog
Balrath Woods	Molerick Bog
Boyne Coast and Estuary	
Boyne River Islands	
Boyne Woods	
Breaky Loughs	
Corstown Loughs	
Crewbane Marsh	
Cromwells Bush Fen	
Dowth Wetland	
Duleek Commons	
Kilconny Bog (Cloghbally)	
Laytown Dunes / Nanny Estuary	
Lough Naneagh	
Lough Sheelin	
Lough Shesk	
Mentrim Lough	
Mount Hevey Bog	
Rathmoylan Esker	
Rossnaree Riverbank	
Royal Canal	
Rye Water Valley / Carton	
Slane Riverbank	
Thomastown Bog	
Trim Wetlands	
White Lough, Ben Loughs and Lough Doo	

Within 15km Buffer Zone	
Proposed Natural Heritage Areas	Natural Heritage Areas
Aghalasty Fen	Black Castle Bog
Ardagullion Bog NHA	Carbury Bog
Ardee Cutaway Bog	Cloncrow Bog (New Forest)
Baldoyle Bay	Hodgestown Bog
Baldoyle Bay	Lough Derravaragh
Ballina Bog	Lough Kinale and Derragh Lough
Ballynafagh Bog	Milltownpass Bog
Ballynafagh Lake	Skerries Islands
Barmeath Woods	Wooddown Bog
Blackhall Woods	
Bog of the Ring	

Castlecoo Hill	
Clogher Head	
Creevy Lough	
Darver Castle Woods	
Dodder Valley	
Donadea Wood	
Drumcah, Toprass and Cortial Loughs	
Dunany Point	
Dundalk Bay	
Feltrim Hill	
Garriskil Bog	
Grand Canal	
Hill of Mael and Rock of Curry	
Kildemock Marsh	
King William's Glen	
Knock Lake	
Liffey Valley	
Lough Bane	
Lough Ennell	
Lough Fea Demesne	
Lough Glore	
Lough Gowna	
Lough Naglack	
Lough Ramor	
Lough Sheever Fen / Slevin's Lough Complex	
Loughshinny Coast	
Louth Hall and Ardee Woods	
Lugmore Glen	
Malahide Estuary	
Mellifont Abbey Woods	
Monalty Lough	
Mount Hevey Bog	
Nafarty Fen	
North Dublin Bay	
Portrane Shore	
Raheenmore Bog	
Reaghstown Marsh	
Rockabill Island	
Rogerstown Estuary	
Santry Demense	
Slade of Saggart and Crooksling Glen	
Sluice River Marsh	
Spring and Corcrin Loughs	
Stabbanan-Braganstown	
Stephenstown Pond	
The Long Derries, Edenderry	

4.2 Reasons For Designation, Site Sensitivities And Threats

It was necessary to describe the 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 database² and Status of EU Protected Habitats and Species in Ireland (NPWS, 2013a & 2013b).

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

Table 3: Qualifying Interests in County Meath and the underpinning environmental conditions.

Qualifying Interests	Key environmental conditions supporting site integrity
Active raised bog	Surface water supply. Low nutrient, acidic conditions to support growth of <i>Sphagnum</i> spp. Restricted drainage at perimeter.
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
Annual vegetation of drift lines	Sandy substrate. Physical impact and nutrient supply from tidal flow.
Arctic Tern (<i>Sterna paradisaea</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation.
Atlantic Salmon <i>Salmo salar</i>	Riverine habitat. Water quality (Q4-5). Riverbed breeding gravels. Quality riparian vegetation. Unhindered migratory routes.
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)	Frequency of tidal submergence
Bar-tailed Godwit (<i>Limosa lapponica</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	Food availability (intertidal fauna/pasture/sewage). Coastal water quality.
Black-tailed Godwit (<i>Limosa limosa</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Common Gull (<i>Larus canus</i>)	Marine prey availability. Wetland foraging area.

² www.npws.ie Accessed 20/12/15

Qualifying Interests	Key environmental conditions supporting site integrity
	Undisturbed roost site availability.
Common Scoter (<i>Melanitta nigra</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.
Common Tern (<i>Sterna hirundo</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel).
Coot (<i>Fulica atra</i>)	Food availability (aquatic flora and fauna). Undisturbed freshwater roosting sites close to feeding sites.
Curlew (<i>Numenius arquata</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Degraded raised bogs still capable of natural regeneration	Dessication from drainage. Low moss cover.
Depressions on peat substrates of the Rhynchosporion	Peat cutting. Surface water supply.
Dunlin (<i>Calidris alpina</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Embryonic shifting dunes	Dune-building grasses <i>Elytrigia juncea</i> and <i>Leymus arenarius</i> . Supply of windblown sand
Estuaries	Supply of riverine freshwater. Unimpeded tidal flow. Shelter from open coasts. Diverse invertebrate communities.
European dry heaths	Free-draining nutrient poor acid soils. Grazing and burning.
Fixed coastal dunes with herbaceous vegetation (grey dunes)	Low wind, weakly saline conditions in shelter of <i>Ammophila arenaria</i> dunes. Grazing.
Golden Plover (<i>Pluvialis apricaria</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Goldeneye (<i>Bucephala clangula</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.
Great Crested Grebe (<i>Podiceps cristatus</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.
Grey Plover (<i>Pluvialis squatarola</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Greylag Goose (<i>Anser anser</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.
Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	Calcium rich, shallow, low nutrient waters.

Qualifying Interests	Key environmental conditions supporting site integrity
Herring Gull (<i>Larus argentatus</i>)	Coastal water quality.
Humid dune slacks	High water maintained by groundwater and impermeable soils. Grazing. Salinity.
Kingfisher (<i>Alcedo atthis</i>)	Marine/freshwater food availability. Undisturbed soft substrate riparian nest sites. Regularity of extreme weather. Water quality.
Lapwing (<i>Vanellus vanellus</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.
Little Tern (<i>Sterna albifrons</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel).
Mallard (<i>Anas platyrhynchos</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation.
Marsh Fritillary <i>Euphydryas aurinia</i>	Larval foodplant <i>Succisa pratensis</i> . Grassland sward structure. Water supply for damp conditions.
Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Frequency of tidal submergence.
Merlin (<i>Falco columbarius</i>)	Moorland Prey availability. Undisturbed forested/moorland nest sites. Regularity of extreme weather. Water quality.
Mudflats and sandflats not 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.
Petalwort <i>Petalophyllum ralfsii</i>	Lime-rich sandy habitat. Overgrazing. Fluctuating water table for damp conditions.
Petrifying springs with tufa formation (Cratoneurion)	Calcium-rich, nutrient-poor groundwater/surface water supply.
Pintail (<i>Anas acuta</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.
Pochard (<i>Aythya ferina</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.

Qualifying Interests	Key environmental conditions supporting site integrity
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 dougalli</i>)	Sea level. Natural/artificial nest site availability. Undisturbed breeding sites. Regularity of extreme weather events. Marine prey availability (sand eel). Predation.
Salicornia and other annuals colonizing mud and sand	Frequency of tidal submergence. Absence of erosion.
Sanderling (<i>Calidris alba</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)(*important orchid sites)	Dry, shallow, calcium-rich nutrient-poor soils. Light grazing.
Shag (<i>Phalacrocorax aristotelis</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds and roosting sites.
Shelduck (<i>Tadorna tadorna</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed coastal roosting sites close to feeding sites.
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Supply of wind-blown sand.
Shoveler (<i>Anas clypeata</i>)	Food availability (interidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Snipe (<i>Gallinago gallinago</i>)	Frequency of tidal submergence. Supply of mud sediment on seaward edge of saltmarsh.
Spartina swards (Spartinion maritimae)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal roosting sites close to feeding sites.
Teal (<i>Anas crecca</i>)	Food availability (intertidal flora and fauna/pasture/cereal). Undisturbed freshwater/coastal

Qualifying Interests	Key environmental conditions supporting site integrity
	roosting sites close to feeding sites.
Tufted Duck (<i>Aythya fuligula</i>)	Fish/crustacean/vegetation availability in shallow inshore/freshwaters. Undisturbed, ice-free marine/freshwater feeding grounds.
Turnstone (<i>Arenaria interpres</i>)	Food availability (intertidal fauna/pasture). Flooding regime of coastal grasslands. Undisturbed coastal roosting sites close to feeding areas.
Vegetated sea cliffs of the Atlantic and Baltic coasts	Flat topography on coastal cliff bedrock. High pH influence of sands and seabird guano.
<i>Vertigo angustior</i>	Stable wetland water table. Emergent vegetation. Groundwater supply. Lime-rich conditions.
<i>Vertigo moulinsiana</i>	Stable wetland water table. Emergent vegetation. Groundwater supply. Lime-rich conditions.
White clawed Crayfish <i>Austropotamobius pallipes</i>	Well oxygenated lakes/rivers with high pH. Riparian/lacustrine substrate of cobbles/submerged vegetation.
Whooper Swan (<i>Cygnus cygnus</i>)	Food availability (intertidal aquatic vegetation/ pasture/ crops). Undisturbed coastal roosting sites close to feeding sites. Grazing.

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

The following generic threats were identified:

Rural/Agricultural activities

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

Economic and Infrastructural Development

- Golf Courses;
- Roads, motorways;
- Coastal protection works;
- Sewage outflows;
- Housing developments;
- Communications Networks;
- Quarries;
- Canalisation;
- Landfill land reclamation;
- Disposal of household waste;

- River Channel Maintenance, and;
- Invasive Alien Species.

Recreation and Leisure

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

These were generic threats and did not take account of specific sensitivities at each Natura 2000 site. Consultation of the NPWS Natura 2000 data forms and liaison with regional staff allowed site-specific sensitivities to be identified. These site-specific sensitivities are presented in the following sections.

5 IDENTIFICATION OF POTENTIAL LIKELY SIGNIFICANT EFFECTS

5.1 Identification of Source-Pathway-Receptor linkages

Each of the changes within the Draft Variation were analysed to identify potential source-pathway-receptor links to European sites, in view of the sites' conservation objectives, to cover all likely significant effects which could arise as a result of implementing the Draft Variation. European Sites that are linked to the relevant aspects of the proposed variation by a reasonable source-pathway-receptor link would be regarded to be within the "zone of influence" of the Draft Variation.

In ecological and environmental impact assessment, for an impact to occur there must be a risk enabled by having a 'source' (*e.g.* infrastructure construction works), a 'receptor' (*e.g.* a European site or a supporting pNHA or NHA), and a pathway between the source and the receptor (*e.g.* a watercourse which connects the source to a European site). It is important to note that the risk of the impact does not automatically mean it will occur, or that it will be significant in terms of the impact on Conservation Objectives for the European site(s). However, identification of the risk does mean that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receptor.

5.1.1 Impacts of Proposed changes to Chapter 1: Introduction.

Changes to Chapter 1 included making references to the Economic Development Strategy for County Meath. This Strategy has not undergone screening for AA but it was reviewed as part of the screening of the AA of the draft variation No. 3. It was considered that whilst the principle implications of the Strategy are to result in increased development and both urban and rural growth, there was not enough geographic specificity in the Strategy to permit the identification of source-pathway-receptor relationships.

None of the changes proposed to Chapter 1 were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.2 Impacts of Proposed changes to Chapter 2: Core Strategy.

Changes to Chapter 2 reflect the incorporation of changes as a result of Variation No. 2. Changes to some of the permitted uses and open to consideration uses were

reviewed and not deemed to pose likely significant effects on European sites. New zoning T1 (Transport Infrastructure) lacks enough geographic specificity to permit identification of where impacts may occur and therefore if they pose likely significant effects. Any likelihood of significant impacts is dealt with by the protective policies listed in the CDP. This land use zoning objective pertains to the existing M3 Parkway rail station and car park.

None of the changes proposed to Chapter 2 were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.3 Impacts of Proposed changes to Chapter 3: Settlement Strategy and Housing.

None of the changes proposed to Chapter 3 were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified. Reference to development at Stamullen and Enfield are not regarded to be so detailed as to permit an identification of source-pathway-receptor linkages.

5.1.4 Impacts of Proposed changes to Chapter 4: Economic Development Strategy.

None of the changes proposed to Chapter 4 were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified. The Five strategic employment sites identified in the Economic Strategy provides a degree of location-relevance but not at enough detail to permit likely significant effects to be identified.

It is noted that the proposed public realm plan for Navan and the Boyne Valley Food Hub initiative will be required to undergo screening for Appropriate Assessment. Whilst text has been deleted referencing the importance of the Boyne Estuary SAC and SPA and River Nanny and Shore SPA, this does not mean that their importance should be ignored.

Other references to specific settlements are not so detailed as to permit identification of likely significant effects on European sites.

Changes made regarding the reference to studies to facilitate the potential development of a deep water port are noted but themselves do not pose likely significant effects on European sites.

5.1.5 Impacts of Proposed changes to Chapter 10: Rural Development.

None of the changes proposed to Chapter 10 were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.6 Impacts of Proposed changes to Chapter 11: Development Management.

None of the changes proposed to Chapter 11 were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.7 Impacts of Proposed changes to Athboy Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.8 Impacts of Proposed changes to Baile Ghib (Gibbstown) Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.9 Impacts of Proposed changes to Ballivor Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.10 Impacts of Proposed changes to Carlanstown Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.11 Impacts of Proposed changes to Carnaross Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.12 Impacts of Proposed changes to Duleek Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

It is noted that whilst there is an intention to produce a Master Plan for the remainder of the E2 lands, such plan will undergo AA Screening by the planning authority.

5.1.13 Impacts of Proposed changes to Enfield Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

It is noted that whilst there is an intention to produce a Master Plan under LU OBJ2 and for the E1/E3 lands, such plans will undergo AA Screening by the planning authority.

5.1.14 Impacts of Proposed changes to Gormanston Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.15 Impacts of Proposed changes to Kentstown Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.16 Impacts of Proposed changes to Kilbride Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

It is noted that whilst there is an intention to produce a Master Plan for the E2 lands, such plans will undergo AA Screening by the planning authority.

5.1.17 Impacts of Proposed changes to Kilcock Environs Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.18 Impacts of Proposed changes to Longwood Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.19 Impacts of Proposed changes to Maynooth Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified. Whilst there is the potential for interactions between development in Carton demesne and the Rye Water Valley/Carton SAC, these are fully addressed in the protective policies in the CDP.

It is noted that whilst there is an intention to produce a Master Plan for the Moygaddy Stud and Carton Demesne lands, such plans will undergo AA Screening by the planning authority.

5.1.20 Impacts of Proposed changes to Oldcastle Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.21 Impacts of Proposed changes to Slane Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.22 Impacts of Proposed changes to Stamullen Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

It is noted that whilst there is an intention to produce a Master Plan for the E2/E3 lands, such a plan will undergo AA Screening by the planning authority.

5.1.23 Impacts of Proposed changes to Summerhill Written Statement.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.24 Impacts of Proposed changes to Ashbourne Local Area Plan.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

5.1.25 Impacts of Proposed changes to Dunboyne/Dunboyne North/Clonee Local Area Plan.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

It is noted that whilst there is an intention to produce a Master Plan for North Dunboyne and lands at Portan, Clonee, such plans will undergo AA Screening by the planning authority.

5.1.26 Impacts of Proposed changes to Ratoath Local Area Plan.

None of the changes proposed were regarded to pose likely significant effects on European sites as no source-pathway-relationships between the proposed changes and the European sites were identified.

It is noted that whilst there is an intention to produce a Master Plan for Raytown and lands off Fairytown road, such plans will undergo AA Screening by the planning authority.

5.2 Analysis of Likely Significant Effects in the context of Protective Policies already in place in the Development Plan

Section 5.1 above described the consideration for any source-pathway receptor linkages of the proposed variation, in isolation. Whilst no likely However it is unreasonable to base a screening judgement without being cognisant of the strategic planning context in which this Variation is proposed.

Specific development proposals will not be permitted if they cannot comply with or conflict with these overarching policies in the CDP. It is reasonable and logical to assess the proposed Variation based on the assumption that these CDP policies will be complied with.

These protective policies are found in Section 3.5 of the Natura Impact Report for the Meath County Development Plan 2013-2019. Some of these have been revised as a result of the Draft Variation 3 but it has not affected the legal requirement to undertake AA Screening for all plans and projects as required under Section 177U of the Planning and Development (Amendment) Act 2010 or by direct application of the European Communities (Birds and Natural Habitats) Regulations 2011.

5.3 Analysis of Likely Significant Effects in combination with other Plans and Projects.

The implementation of the draft Variation no. 3 will take place within the context of the overall CDP and also in the context of other plans in Meath and its environs and other projects. However since none of the proposed elements of the Draft Variation have been associated with source-pathway-receptor linkages to European sites it is common-sense to conclude that there is no risk of likely significant effects in combination with other plans and projects.

6 SCREENING CONCLUSIONS

Following an analysis of the Proposed Variation No. 3 to the Meath County Development Plan 2013-2019 and potential relationships with European sites within the zone of influence, it was concluded that there would be no likelihood of significant effects on any European sites, either alone or in combination with other plans or projects. This was informed by the collection of best available scientific data on the European sites and identification of the condition, sensitivities and threats to the integrity of the sites and QIs/SCIs therein.

It was concluded that none of the aspects of the Proposed Variation would give rise to any of the threats listed in Table 2 particularly after the protective policies and objectives provided for in the existing development plan have been taken into account. Therefore there is no requirement to carry out further stages of Appropriate Assessment on the Proposed Variation No. 3 to the Meath County Development Plan 2013-2019.

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